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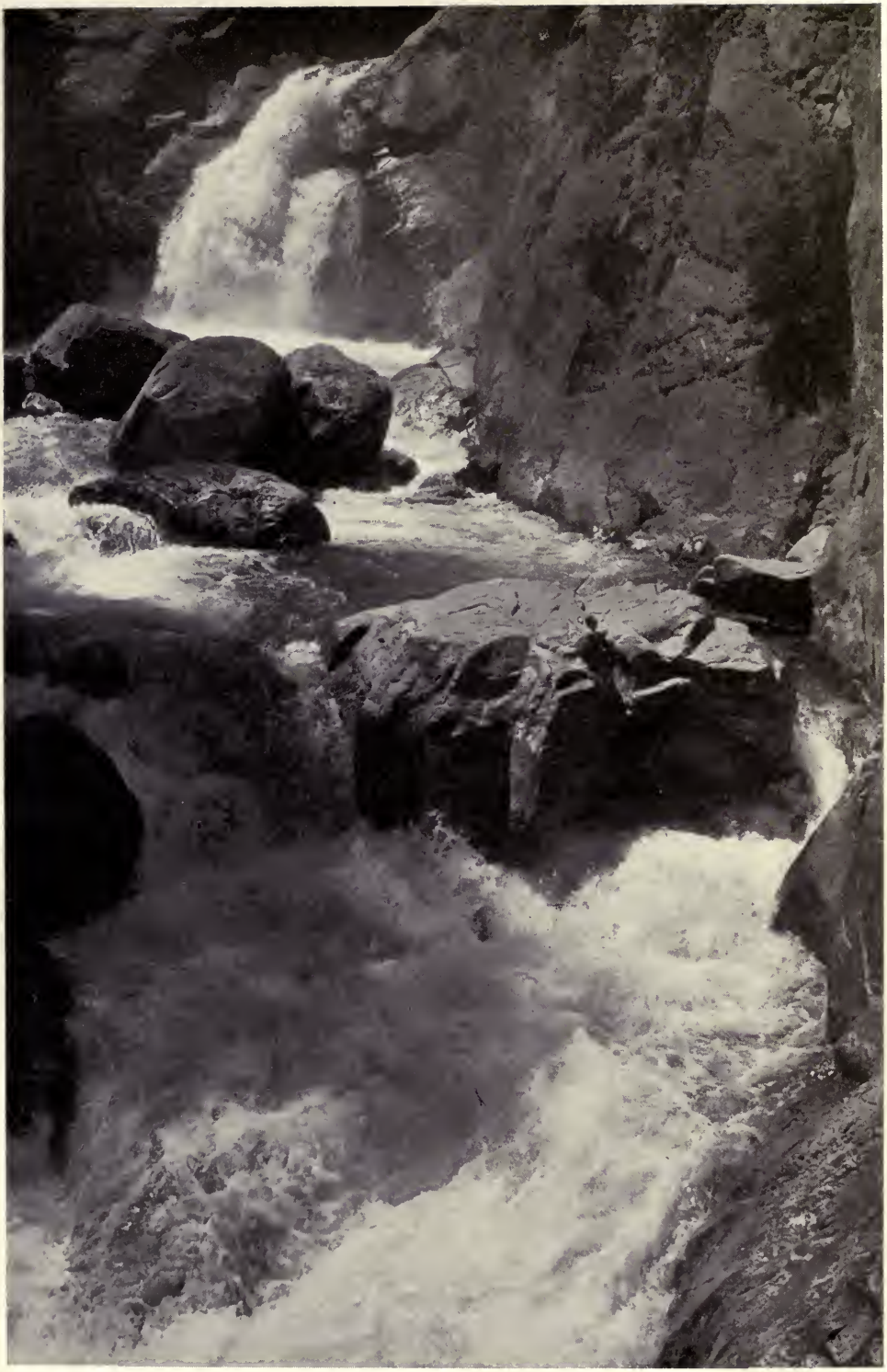


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AMERICAN PLANNING AND CIVIC ANNUAL

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Kings River in the New Kings Canyon National Park

AMERICAN PLANNING AND CIVIC ANNUAL

A RECORD OF RECENT CIVIC ADVANCE IN THE FIELDS OF PLANNING, PARKS, HOUSING, AND NEIGHBORHOOD IMPROVEMENT, INCLUDING THE PRINCIPAL PAPERS DELIVERED AT THE NATIONAL CONFERENCE ON PLANNING, HELD AT SAN FRANCISCO, CALIFORNIA, JULY 8-11, 1940, AND THE NINETEENTH NATIONAL CONFERENCE ON STATE PARKS, HELD IN ILLINOIS AND INDIANA, MAY 12-16, 1940.

EDITED BY

HARLEAN JAMES

AMERICAN PLANNING AND CIVIC ASSOCIATION

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PREFACE

THE AMERICAN PLANNING AND CIVIC ANNUAL for the year 1940 is an attempt to present a picture of what has gone on during the year in the fields of planning, parks, housing and civic improvement. Some phases have been omitted for lack of space and others are sketched in without detail. About half of the material was prepared especially for the ANNUAL; and all of the principal papers which were presented at the National Conference on Planning held in San Francisco, July 8–11, 1940 have been included.

The National Conference on Planning, as in former years, was sponsored by the four national planning organizations as follows:

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The Director of the Conference was Walter H. Blucher.

The papers presented at the Nineteenth National Conference on State Parks appear in the section on State Parks, together with a report prepared by the National Park Service on Progress in State and Local Parks.

The Conference sponsored by the Annual Meeting of the

NATIONAL CONFERENCE ON STATE PARKS
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The section on National Planning is opened by a paper by Dr. Charles E. Merriam, delivered at the San Francisco Planning Conference—perhaps the most significant contribution on the program of the San Francisco meeting. Dr. Merriam's address is at once a critical analysis of the principles of democracy and the nature of planning and a confession of faith in the citizens of the Republic.

Let us hope, therefore, that in the United States of America planning will continue to be closely tied to accurate factual studies, that the fullest use will be made of technical advice, that plans will be aimed to serve the public good, and that democratic processes will be utilized in the practice of planning. To that end, the 1940 AMERICAN PLANNING AND CIVIC ANNUAL is dedicated.

HARLEAN JAMES, *Editor*

Washington, December 18, 1940

AMERICAN PLANNING AND CIVIC ASSOCIATION

THE purpose of the American Planning and Civic Association is the education of the American people to an understanding and appreciation of: local, state, regional and national planning for the best use of urban and rural land, and of water and other natural resources; the safeguarding and planned use of local and national parks; the conservation of natural scenery; the advancement of higher ideals of civic life and beauty in America; the improvement of living conditions and the fostering of wider educational facilities in schools and colleges along these lines.

NATIONAL CONFERENCE ON STATE PARKS

THE purpose of the National Conference on State Parks is to inform the public through a central clearing house of information, publications, conferences, courses of training in schools and colleges, and by other educational means, of the value of state parks, historic sites, forests and preserves, suitable for recreation, study of natural history and science, preservation of wildlife and conservation of natural scenery, by the development within the States of well-balanced state park systems; to the end that every citizen of the United States shall have easy access to state recreation areas and appreciate their value as a recognized form of land-use.

The two organizations join in the publication of
THE AMERICAN PLANNING AND CIVIC ANNUAL and in the
QUARTERLY, PLANNING AND CIVIC COMMENT

THE NATION

NATIONAL PLANNING

Planning in a Democracy

CHARLES E. MERRIAM, Chicago, Ill., Vice-Chairman, National Resources Planning Board

IT IS sometimes maintained that planning cannot be conducted in a democratic form of society but must be confined to totalitarian systems, to autocratic authorities, using widespread violence or the threat of violence.

Before considering the question of democracy in planning, it is important to reconsider what the nature of democracy is, and then what planning is; and then the relation of democracy to planning.

I. What Is Democracy?

There is nothing new in the statement that democracy is under fire. It always has been. For a few years after the World War the attacks upon democratic organization died down and perhaps seemed to some ended, but this was only an intermission—a lull in the storm.

For centuries there have been two opposing assumptions about control in political society: (1) that the control of the common affairs of the community belongs in the few; and (2) that the control of the common affairs of the community belongs in the many.

The problem of the few has been: (1) to find the superior, (2) to continue the line, (3) to insure their regard for and judgment of the common good, and (4) to bring about mass confidence in their intentions and actions. Mirage, rainbow, illusion, are written on this record.

The alternative is government of common affairs by the community.

The old charges against democracy may be summed up as follows: (1) It is adapted only to a very small state—a city state—the hillsides of Switzerland. (2) It must be the rule of the ignorant herd. (3) It must be a weak government incapable by its very nature of military survival.

Democracy has been attacked in recent years from the right and the left for diametrically opposite reasons. Marxians have held that democracy is the necessary and inevitable tool of capitalism, while on the other hand, right wingers have held that democracy is the handy tool of socialistic trends and purposes. So the revolutionary wing of the Marxians attacked democracy by Bolshevism, although the social democracy went along with democracy. In Italy and in Germany Fascism and Naziism were conjured up as saviors of the world from communism. These rapid fadeouts and closeups may be a little confusing, but if you look at them carefully with a slowed down reel, the confusion disappears. For Democracy appears as a symbol for something that stands in the way of impatience for results, right or left wing.

In the newest invasion of our western democracies, violence is glorified and the virtues of reasonable discussion decried. The language and the tone are that of frustration, hate, ruthlessness. They shout indeed, rather than speak. The lack of a carefully thought out anti-democratic theory, however diligent the search, suggests that the basis of the anti-democratic view is found in the desire to set up a propaganda defense of militarism and national expansion.

If you look for serious and well-considered critiques of democracy, the best are made by democrats, who alone can speak freely of their faults.

What are the assumptions of democracy?

1. The dignity of man and the importance of treating personalities upon a fraternal rather than a differential basis.

2. The perfectibility of man—the confidence in developing more fully the possibilities latent in human personalities—as against caste, class and slave systems.

3. The gains of civilization and of nations are essentially mass gains, the product of national effort—in war and in peace.

4. Confidence in the consent of the governed, expressed in institutional forms, understandings and practices as the basis of authority.

5. The value of decisions arrived at by rational processes, by common counsel, with the implications of tolerance and freedom of discussion, rather than violence and brutality, normally.

The implements of democracy are the suffrage, the deliberative council, the apparatus of civil liberties, and finally sound administrative organization and systems of adjudication.

Much confusion has been caused by the entangling of democracy with economic systems or with areas or units of government. Democracy is a form of political association, not identified with any special form of economic organization, or with any special unit of aggregation, such as the city-state, the national-state or the world-state or the class-state.

Democracy is a form of political association which disappears from time to time but does not die. It is a continuing type of political association which has its roots in the community whose common affairs are decided by the community. This then is a basic principle of association, and in the long run, whatever may happen in the meantime, this principle will go on. The common good will be determined by the community.

Even those who are now heckling democracy cannot escape its implications. Why do they not abolish the vote? Why do they not abolish the forms of representation and consultation? Why do they profess their own superior capacity to reflect the people's will and interest? Hitler speaks of a "true Germanic democracy"; Mussolini demands an "Italian proletarian democracy"; the soviets refer to a "socialistic democracy."

And this is done because the symbolisms of democracy, the attitudes of popular rule, the demands of popular welfare, are so deeply ingrained in the modern mind that they cannot safely be challenged, even by those

who seem to hold in their hands autocratic power. In the end the commonwealth will be what the community wants, expressed in such forms and institutions as the community chooses and supports.

Some basic considerations must be examined before going farther. The most revolutionary factor in modern life is not Naziism or Fascism. It is the unparalleled growth of human reason, science, invention, technology. The National Resources Planning Board, in its elaborate report on research as a national resource, showed that in the United States alone there were 1,300,000 patents for inventions in the first third of this century and there will be more in the next third. What does this mean?

1. Inventions in transportation and communication have upset the political boundaries of the whole world, dwarfing them out of all proportion and compelling basically new adjustments.

2. Increase of productivity has revolutionized the world by making a transition from an economy of scarcity to an economy of abundance, and necessitating reconsideration of traditional practices.

The whole struggle over democracy is utterly blind without taking these factors into account, and without reckoning on the entrance of democracy into this new New World.

The age-old struggle between the many and the few is now cast upon another and a different stage. Whatever happens, new means are emerging for the attainment of the old ends, whether democratic or autocratic.

The old assumptions of democracy are still good, but its programs and practices must be adapted to a new world; and the same is true of the assumptions of aristocracy and autocracy. We are not going backward, but forward. Security, justice, liberty are on their way, and will not be blocked by guerrillas, grafters, and incompetents.

What shall we do with our vast machinery of production? How shall we spell out the meaning of democracy in the daily lives of men and women? Are war and unemployment the only alternatives? What shall we do with world order? Are we prepared to consider not only the ends of democracy but also its means at any given time, and to adjust accordingly? Democracy must have not merely a past, but a future; not merely traditions, but inventions.

In a transition period, there is much intellectual confusion.

1. *Dictators.* The so-called dictators of the modern day are not dictators at all, but are despots or autocrats. They do not even call themselves dictators, but Duce and Fuehrer. Dictatorship is a historical democratic device. In the days of the Roman Republic a dictator was appointed for a short and specific time to save the state. At the end of the time he returned to his plow or wherever he was before. The present day autocrat, on the other hand, did not obtain this power from the people, nor does he intend to return it at any time.

Daladier had dictatorial powers but was removed from office in the middle of his career. Chamberlain had broad powers but left office even

when he had a majority of eighty, because of public criticism. Clemenceau never attained the presidency of France. Lloyd George became a voice crying in the wilderness.

No real student of democracy ever maintained that a democracy could not defend itself in a moment of crisis. The real question is, are the emergency powers to be returned? Is there a working mechanism for that purpose, and a working general understanding?

2. *Decisionism.* The charge that democracy is incapable of decisionism and decisiveness is a favorite assertion of its critics, and this is sometimes conceded unnecessarily by its friends. Democracy can neither conduct a war, it is charged, nor organize internal social programs adapted to our time.

That democracy cannot make the preparations or decisions incidental to war is not sustained by cold historic facts. The British navy has been traditionally powerful; the French army a great war machine; the American army in 1865 was the most powerful in the world. And our air force will be, I predict. The mechanized force of present-day Germany is not a thing that a democracy could not have constructed, had it wished for war and paid the price in national standards of living. The present guerrilla warfare came on because the gentleman with the umbrella thought he was dealing with likeminded gentlemen.

Where the parliamentary chamber is silent there is always an antechamber where discussion, conflict and intrigue have their way. Often there is discord and delay. Our debates are in the open, but if we knew what went on behind the scenes of autocracy, we might be amused. There is plenty of history to illustrate this since the days when the Roman emperor made one of his horses a knight.

There is no guaranty even that an autocrat will be decisive unless he has that kind of mind. He may be a moron or indecisive in his very nature. The effective basis of decisionism in any government is not arbitrariness, but rests on coöperation soundly organized for action.

3. *Inefficiency.* It is said, "Of course it must be admitted that democracies are not and cannot be as well organized or as efficient as autocracies."

The laboratory of history furnishes many illustrations of inefficient democracies and also of inefficient non-democracies. There is nothing in the science of management to indicate that a democratic board of directors responsible to a body of owners cannot set up a form of policy determination and forms of administration which will work effectively in a wide variety of situations, both in normal times and in crises. The growth of the art and science of public administration in modern times makes it more feasible than before to organize control in last analysis and working management. Modern democracy has opened administration to democracy, instead of restricting it to a class.

Underneath all the controversy of parties, factions and even of forms of government, an observer cannot escape seeing the immense advances

of scientific, expert administrative service. This does not mean that all government will land in the hands of experts, but that the administration of plans predetermined by the community will rest in the hands of expert, technical, competent public servants. This is one of the great guaranties of human progress in governmental affairs, and especially of democracy.

On the policy-forming side, democracy makes possible the higher development of morale—an intangible factor that often wins wars and enlarges productive capacity in peace. A democratic government may be as weak or as strong as the emergency or the temper and custom of the people desire and demand.

4. *Violence.* There are those who strike from their lexicon the word "violence." They find refuge and solace in the Oxford oath—that was before the bombings began.

We must concern ourselves with force in order that we may be able to reason, in order that we may carry on the pursuits in which we wish to engage. We must set up a world in which the values we cherish may live and grow and come to their special forms of perfection.

What we call "violence" is an inferior form of organization itself. It is the task of reason to examine this organization, to understand it, to invent forms of reorganization which are superior in type and which may come into general acceptance as we go along. Violence is really the inferior organization of vital life forces. We do not seek to abolish these energies: we aim at their reasonable control.

The difficulty is not with the high explosive but with the purposes to which it is devoted in a given situation. The organization of violence is a technical question, to answer which men of reason will be called. There is no reason why bandits and gangsters should be given the secrets of the laboratory, of management, of psychology, of medicine.

Reason must yield to force, some say, in this era of open assertion that might makes right, within the state and without. No, the answer is that reason itself is the greatest force, and in the end it will prevail. The great work of politics is to promote the commonwealth as seen by reason and applied by reasonable measures through reasonable men. But reason must be allied with will, with faith, with hope, with practical judgment, and must be set as the jewel in organization and management. It is one of the very greatest tasks of politics, now and always, to bring about the fusion of these factors—their union and their expression—in the richest forms of social and political life.

II. What Is Planning?

Planning is an organized effort to utilize social intelligence in the determination of natural policies. Planning is based upon fundamental facts regarding resources, carefully assembled and thoroughly analyzed; upon a look around at the various factors which must be brought together in order to avoid clashing of policies or lack of unity in general

direction; upon a look forward as well as a look around and a look backward. Considering our resources and trends as carefully as possible, and considering the emerging problems, planners look forward to the determination of longtime policies.

Many of these plans will be imperfect. Some will be mistaken. But taken in its entirety, all planning effort amounts to an intelligent forecast of the nation's future, as carefully prepared as is possible from the technical side, and as prudently as possible from the point of view of community determination of community policies, local, state and national.

From the beginning of our national life various forms of planning have been in evidence. The industrial situation confronting the founders of this republic was one of widespread distress, insecurity, and depression of the most anxious type. They deliberately planned a way out. The constitution itself was an economic-political plan on a grand scale, not only providing a democratic frame of government, but also setting up special plans for dealing with currency, tariffs, interstate commerce, and international relations. Justice was the first term in the preamble and liberty the last, but between them came the general welfare, common defense and domestic tranquillity. The constitutional convention itself was a large-scale planning board.

Alexander Hamilton's well-known *Report on Manufactures* presented in 1791 was an impressive consideration of national policy in industry and related fields of American interest. In broad terms Alexander Hamilton set out the national problems of economics and government and suggested specific lines of policy to be followed. The report on internal improvements drawn up by President Jefferson's Secretary of the Treasury, Albert Gallatin, was almost equally notable. Henry Clay developed later (1820) the famous "American system," in which tariff and internal improvements occupied a conspicuous place. It is clear that the encouragement of manufactures by a policy of protection began as a systematic planning procedure, though later it degenerated at times into a free-for-all scramble for favors.

The land policy of the United States was planned with similar deliberation. It began with the abolition of the system of primogeniture and entail, the basis of the British system of political and economic power. The "grand plan" of John Quincy Adams for the management of the national domain was not followed; but the later development of the American homestead policy (1862) was designed to give a homestead at a nominal cost to practically all prospective settlers.

Our public educational policy rested in large part upon the broad grants of public lands given—two sections per township—for school purposes, with additional amounts for land-grant colleges. All this was notable national planning as of that day and age, democratic in purpose and method and highly successful in producing results. Those who pre-

fer not to call this planning may, of course, apply some other term, but that will not change the spirit and temper of the work of the first great national planners who laid broad foundations for the republic of their dreams.

Down to the Civil War, no country in the world had made bolder and more successful experiments in the field of government and economics alike than the United States.

Following that war, planning centered for several decades in large-scale private industries, such as had scarcely been known theretofore. Giant enterprises began to dominate whole areas of industry, and to operate them in increasingly unified and systematic fashion, although not always in the public interest. But national planning did not cease. It was resorted to whenever the public came to believe that unrestricted business enterprise failed at some point to promote the national welfare. Examples of government intervention designed to protect public interests are the establishment of the Interstate Commerce Commission in 1887, and the passage of the Sherman Antitrust Act in 1890, the organization of the Federal Trade Commission, and a long series of national and state measures having the same general purpose.

A less controversial step toward national planning was the development of the conservation program designed for the protection of natural resources under the leadership of Theodore Roosevelt. This wide-ranging movement, based upon study of prevailing trends, constituted a striking example of intelligent and forward-looking national policy, designed to protect and promote our common interests through various types of controls preventive of wasteful exploitation of our basic resources. In addition to the plans of the United States Government, similar systems and arrangements were set up by several of the States in various fields.

A more dramatic development of national planning was the "economic mobilization" developed during the World War through the War Industries Board, the War Trade Board, the Shipping Board, the War Labor Board, the Food Administration, the Fuel Administration, and the Railroad Administration, with their various subsidiaries. Under the stimulus of the war objective and national unity of purpose, far-reaching plans were made for the utilization of resources, for the ordering of industry, and for the focusing of the nation's strength in military and naval pressure. Nor did plans for economic mobilization end with the war. The National Defense Act of 1921 is a plan for a national war emergency—a plan which covers the wide ranges of industrial life necessarily reorganized for war purposes.

Though the war-time controls were released promptly after the armistice, the speculative boom of 1919–20 and the severe though brief depression of 1920–21 brought home to everyone the fact that peace hath her defeats no less than war. The elaborate report on *Waste in Industry*, sponsored by the American Engineering Council in 1921, was a landmark

in a movement toward better economic management, and this line was followed by important developments of planning in the Department of Commerce. By improving methods of management and extending markets, it was hoped to increase profits and thus enable business to give full employment and pay high wages, while turning out an ever larger volume of consumers' goods—a policy that was thought for a while to promise the gradual abolition of poverty. Trade associations began their rapid growth under the benevolent auspices of the United States Government. Attacks upon waste, demands for standardization, simplification, research in production efficiency, long-time plans for stabilization and equilibrium in industry, were pressed forward.

Another notable development was the reorganization of the budgetary procedure of the United States Government through the Budget Bureau and the Director of the Budget—a reform long advocated and finally accomplished—under President Harding. While many of these powers were already in the hands of the president, the deliberate planning of ways and means for the exercise of his authority unquestionably had an important influence in the direction of systematic scrutiny and control over public expenditures.

The organization of the Federal Employment Stabilization Board through the efforts of Senator Wagner and President Hoover was an attempt to plan expenditures for public works over a period of years in relation to business cycles. The six-year programs of public works collected by this board from many government bureaus made it possible for the Public Works Administration in 1933 to put out a billion dollars of federal construction within a few months far more promptly than they could bring a large volume of non-federal undertakings to that stage.

Since that time many forms of planning have appeared. City planning agencies have sprung up, reaching now the number of some one thousand. County planning boards have been established covering a quarter of our three thousand counties. Some forty-five state planning agencies have been established. Regional planning committees have been set up and commissions on interstate coöperation have been organized by most of the States. Many large-scale efforts in the field of planning have been developed by the United States Government in the last ten years, beginning with the Reconstruction Finance Corporation, the Home Owners' Loan Corporation, and the Federal Employment Stabilization Office under President Hoover, and followed by notable examples under President Roosevelt. Attempts made in this direction include planning in agriculture, in labor, in industry, in the Tennessee Valley Authority, in public works, in land, water and mineral use, for social security, education, scientific research, for city, county, state, region and nation.

The National Resources Planning Board, created by President Roosevelt in 1933, was substantially the projection of the Advisory Council, proposed by President Hoover's Committee on Recent Social Trends in

1933. This body has made fundamental studies and contributions to intelligent national policy in relation to land use, water use, mineral and energy uses; by fine programming of public works; scientific studies of population trends, of the social effects of inventions, of research as an actual resource; of regions and cities; reports upon the structure of our national economy, of consumer expenditures and consumer income.

Progress of planning in recent years has naturally followed the lines previously indicated in agriculture, industry, public works, etc. Perhaps the most notable advances in the planning movement have been made in the agricultural field with the organization of the Agricultural Adjustment Administration, and later through the reorganization of the department's planning for the development of our agricultural resources which has been pushed ahead through democratic procedures with state agricultural advisory councils and county agricultural planning agencies. There are now many county agricultural councils where, under the leadership of the county extension agent, farmers and representatives of bureaus of the agriculture department get together for determination of land-use policies. Through the coöperation of the Department of the Interior and the Department of Agriculture in the Land Committee of the National Resources Planning Board major investigations of problem areas and policy problems have been initiated with joint field action in the Northern Great Plains, the Pacific Northwest, the backwater areas of the Mississippi, and the Northern Great Lakes area, and on policy problems—tax delinquency, public land acquisition, land classification.

Experience and the great wealth of information developed by the research staff of the National Recovery Administration has laid a foundation for further advances in industrial planning; and economic studies through the Temporary National Economic Committee and the National Resources Planning Board have furthered planning with them for industry. The availability of unemployed workers for fact-gathering has made possible the studies of consumer income and expenditures through the joint efforts of the Bureau of Labor Statistics, Bureau of Home Economics, the National Resources Committee and the Works Progress Administration. Through the Industrial Committee of the Board, techniques have been explored for measurement of productive capacity, and a major report prepared upon the structure of the American economy.

Public works are a tool for national development as well as for conservation of resources, and, to provide employment, have of course been enormously expanded in recent years. Planning techniques and the possibilities of programming in accordance with the general theory of the Federal Employment Stabilization Act have been and are still being developed.

In recent years our human resources have received greater emphasis than ever before which has led to a planned approach to problems of old-age pension, unemployment insurance, relief policies, social security.

Notwithstanding differences of judgment regarding either the policy or the administration of these undertakings, there is general agreement that many of them have been highly successful, and taken together they illustrate the importance of planning our fundamental national policy in the emergency period upon which we are now entering. Doubtless many other evidences of national planning of resources both natural and human will be seen. It becomes more and more evident that the fullest use of American national resources cannot be obtained without careful and intelligent planning—national, state, regional, and local.

III. Democratic Planning

Much of the criticism of democratic planning is made by those who have not clearly understood either "democracy" or "planning." Of course, if we assume that the community does not know and cannot know what it wants, and if we assume that drifting is better than planning, we will not want either democracy or planning, much less the two in combination. When the nature of the democratic political society is thoroughly understood and when the nature of planning is carefully considered, it becomes evident not only that planning is possible in a democracy, but that the soundest form of planning will be found in the soundest democracy.

Two traps are set here for boobs. Trap one, that all must be planned. Trap two, that nothing can be planned. There are those who contend somewhat noisily at times that no substantial advance can be made toward the readjustment of our internal social problems unless all is planned in totalitarian style, and that by violence and revolution. Progress through catastrophe we call this doctrine. It is proclaimed alike by the left wing of the socialistic movement and by the new autocrats. Nothing but a series of surgical operations can save the patient, they seem to say. Or in the old biblical language, "Without the shedding of blood there is no remission of sins." Even Professor Laski seems to hold that democracies cannot reorganize their affairs without a strong purge by the salts of revolution.

On the other hand, there are those who cling to the conviction that all or most governmental "intervention" or "regulation" or "control" or "guidance" is either superfluous or dangerous. Otherwise sane men declare that every tax dollar is lost even if spent for schools or fire departments, or all government is smeared as bureaucracy, or all planning by the same logic is unwise and even subversive—perhaps not city planning or county planning. But in general all government planning is suspect. All this reckons without the complexities of modern life and the swift pace of mechanized industry.

We can plan for peace as well as for war. We can solve the basic problem of national production, the problem of unemployment, the problems of social security, if we have the will and vision to make a

common effort worthy of the emergency in which we find ourselves. Our economy is not a closed one. We can make our seventy billion income eighty billions or whatever the optimum figure may be, within the framework of free industry and free government. We can make sure that our national gains are democratically applied.

This will involve planning, as will our whole world situation, but planning within the boundaries of free society, industrial and political. The unplanned society in our day will not survive the competition of our time. Some seem to forget that we can plan to be free as well as plan to be unfree. Planning nothing is the direct road to planning everything.

The basis of planning is not autocracy, totalitarianism, or violence, but is intelligent coöperation. The common good is best promoted when the community has something to say about it, when the community has power to determine what is the general good and how that shall be discussed, decided, and administered. Planning involves the exercise of foresight, it involves coöperation, it involves a general understanding of long-time policy and a general determination to advance the common good as understood by the bulk of the community. Planning is not helped by becoming totalitarian, but hindered.

The common good does not call for complete uniformity in conduct but requires variation in things that are not common. Effectiveness is determined not merely by the complete concentration of the power to decide, but also by that general good will and coöperativeness without which wise decisions cannot be made, or, if made, cannot be carried out. It is true that in a moment of great crisis—as in pestilence, war, famine, flood, fire—unity is important. To some this unity may seem important not only for a crisis but as a continuous practice. In reality, however, concentration in an emergency rests upon the assumption of long-time coöperation. The old-time dictators "crashed in," so to speak, on habits of coöperation in the state. But coöperation is soon exhausted unless it is renewed and revived by participation of the community in the consideration of questions of the common good. Everyone may subordinate his will for a while in putting out a fire and in rescuing persons and property threatened by flood, but when it comes to an extensive program of fire and flood prevention, the habits, customs and will of the large number of people must be taken into consideration and with the greatest care. Wide ranges of peoples and wide varieties of personal interests and choices are involved, and must be the basis of any plan.

America is committed to the propositions (1) that the best government is found where the bulk of the community determines the broad lines of community policy, and (2) that community policies are better determined by rational consideration, deliberation and coöperation than by violence.

Despotisms old and new, in many periods of the world's history, have built great monuments flattering to their pride—great pyramids, great

boulevards, great empires—and some of these monuments, built as they were upon cruelty, blood, hate, and scorn of the humble man, stood for centuries, and indeed will stand like the pyramids. These despotisms were not concerned, however, with the elevation of all men, with the fair distribution of the gains of the community, with raising the standards of human living—material, intellectual or spiritual, with the emancipation of the slave or the serf, or with the unfolding of the possibilities hidden in the human personality.

Our democratic planning is aimed at the highest possible standards of national production constantly expanded through the years, and at the translation of national production into the lives of the mass of our citizens. We plan not for the glory of the conquerors or the gratification of national hatred or national pride, but for ennobling and enriching the existence of our citizens and of mankind.

We stand at the gates of the age of plenty, key in hand, fumbling at the lock. Make no mistake, we face a new era. We are not going back, but forward, to build in the New World a new and finer form of American democratic state, a loftier realm to which human personality may wing its way and finds its home.

For my part, I hold that America will come triumphant through this the greatest ordeal of modern times—triumphant not merely in a material or in a military sense, but triumphant in the higher and finer values where life really dwells in its fulness.

America will take its place and assume its share of responsibility in shaping and maintaining a jural order of the world, in lifting human relations to new levels of order and justice. "Am I my brother's keeper?" is a phrase that has echoed and re-echoed in human history as a justification for selfish gain, but there is a higher ideal expressed in the loftier words, "No man liveth unto himself alone."

America will work out a program, built upon national unity, which will raise the volume of national production and at the same time raise the standards of living in accordance with the principles of social justice. Our vast national resources, our dynamic energy, our inventiveness and resourcefulness, our organizing ability, our huge economy with its rich powers of expansion, make this a possibility. But this is not the task of soft hearts and heads alone, but of hard heads and tough temper. America will maintain its free society, industrial and political, streamlined to meet the changing conditions of modern life.

If we are prepared in America, then those of feeble faith and weakening will and fumbling judgment can be disregarded. Those will carry forward the torch of democratic ideals whose stout hearts are unterrified and unintimidated by threats, scowls and blows. Men with clear eyes can discern and point out the sounder courses, and America can advance to the destiny that spreads before a people with the richest possibilities ever within the grasp of man.

Planning the Use of Our Resources

CHARLES W. ELIOT, Washington, D. C., Director, National Resources Planning Board

THE Nation is aroused to the immediate necessity of using and mobilizing our resources for defense. We are all concerned in this cause—as individuals, as business men, as taxpayers in our local communities, as voters in the States where we live, and as patriotic citizens of the Nation. To be effective in this cause, we must plan and relate the plans of many groups for varied purposes into a national plan and program.

The first item in a National Defense Program is a decision on *what we are going to defend.* Most people find a good enough answer in phrases like "The American Way," or "No European interference in the Western Hemisphere." But for the preparation of a plan we need something more. Our country and our times are entering a period of great change. With what has already happened in Europe—and whatever still lies ahead, the world—including this country, is going to be a very different place from what it has been. I, for one, am not interested in trying to defend or perpetuate a dead past. What we have had or have done is not so perfect but that we can do much better. It is the right and opportunity to "do much better" that I think we want to protect—the chance to work out changes and improvements in the use of our resources in gradual transition, through orderly procedures, and using the democratic process with minimum interference from Europe or Asia.

That is the second item for decision—what we are preparing to defend ourselves *against.* The world is too small to allow us to isolate ourselves against all "interference." We face not only problems of re-armament in terms of warships, planes and tanks, but also rearmament against propaganda. In fact the attacks on our form of government, on our economy and on our ideals, have already started. The President says we must "make Democracy work within our borders." That implies that it has not been working as efficiently and effectively as we think it can and ought to work. To combat the propaganda of the totalitarian fascists or communists, we must prove that the "Democratic Way" can provide and maintain higher standards of living, jobs for all, security and our political rights and freedom, more surely than any other way.

From the answers to these two questions on what we are going to defend and what we are defending ourselves against, the conclusion follows that planning for defense involves much more than mobilization of materials, machines, and men to meet possible attacks upon this hemisphere by armies or navies of other nations. As the President put it at Charlottesville (June 10, 1940) "we still insist on the need for vast improvements in our own social and economic life. But that is a component part of national defense itself." Our present task is planning

for the conservation, development and organization of our resources in ways "to make Democracy work," to make needed changes in our economy and governments in orderly transition, and to make America impregnable against propaganda and sabotage as well as against bombs and bullets.

This conference is concerned with the rôle of *planning* for these purposes. I am thinking of planning as a process—thinking ahead, preparing, picturing objectives, proposing methods, and programming steps. Of course, this planning process can be used for good or evil purposes, the methods proposed may seem to us wise or unwise, and the program may be an orderly well balanced scheme or ludicrously unbalanced. There have been, and I suppose will be, many plans of which you and I wholly disapprove—the war plans which have called for ruthless violations of the little neutrals, "strafing" refugees in Flanders Fields, the regimentation or destruction of liberty and opportunity—these are evidences of the planning process which we hope and believe we can avoid.

The fact that plans like those are loose in the world makes it the more imperative that we in America should make our own plans—Preventive Plans and Development Plans.

Our best hope lies in *positive planning*. In emphasizing positive planning, I do not want to minimize the importance of restrictive planning—we *do* want "master plans," zoning and other forms of negative planning—the kind that is based on the commandment, "Thou Shalt *Not*." But let's recognize that *positive* stimulative planning is of even greater importance. The command *Thou Shalt* is vastly stronger than *Thou Shalt Not*!

Let's change negative planning into preventive planning—"Thou Shalt Not" sounds to my ears too much like regimentation. I fear that the analogy of planning a town with planning a building or an engineering structure has been overdrawn. An architect's blue print shows a plan for building, a *static* structure. It can be designed and built according to plan—and deviation from plan may be a very serious matter. But a zoning plan, or a Master Plan for a growing *dynamic* community is an entirely different story. It is a record of ideas which, if too rigidly applied, may put the community in a strait-jacket. It is useful *not* as a blue print to be slavishly followed, but rather as a proposal to be revised, fitted, changed, as soon as the ink is dry. I like to think of the Regional Plan of Washington, which I developed some ten years ago, as a picture of opportunities which should be left open for the next generation to adapt to their needs. It is a preventive plan—to prevent this generation from getting in the way of our successors.

We want more than prevention. We have seen by the way things have gone in Europe these last few months that preventive plans are not enough. We must have positive proposals too—a program of action and

stimulants to cause action. The next phase in the development of the so-called planning movement should now be emphasized—the combination of programs and plans. The time has come to focus our research, our pictures, plans and dreams into practical programs.

Among the planning practitioners there is an ancient war over programming and planning. They talk about them as though they were two inconsistent processes, and ask, "Which shall come first?" The old story, you know, of the hen and the egg! And the answer, of course, is that we have to have both plans and programs at the same time. To do useful planning, the planning agencies must be in there fighting before the battle starts—for planning is looking ahead to anticipate problems. The best chance to coördinate plans is while they are being formulated and before they crystallize. But the planning agency must be in at the finish also with a practical solution—a program.

I have used fighting terms in these remarks, more than is warranted no doubt, but that is the all-pervasive spirit of these terrible times in World affairs. In such times, all of us who are concerned with planning agencies are asking what should be the rôle of planning in the immediate emergency of National Defense. The times call for action programs. We can help that way. But we can play an even more useful rôle, I think, by "sticking to our last"—the long-range view. The things that must or may be done because of the emergency can be done without regard to their long-range implications or they can be done—in most cases equally well—in ways which push ahead towards long-range objectives. It behooves all planning agencies to keep looking ahead to those objectives and to serve as reference points on the relation of immediate proposals to long-range plans.

Now more than ever those in authority need facts, knowledge of what we have, and the tools of research. The planning agency is organized to make those facts immediately available and to do the research work that is needed. Planning agencies in cities, States and in the Federal Government ought to have the knowledge of our resources upon which both emergency and long-range plans can be based.

I want to stress a statement which the National Resources Planning Board has made repeatedly, that planning is and must remain advisory only. *But* advice can be cogent, insistent and well timed! It is part of the *plan*, is it not, that planning advice should be all of those things?

Planning is advisory. It takes the long view. Planning must be based on facts and more facts. It needs more practical positive programs. It must be developed "from the ground up." I believe that planning can be one of the great mainstays of Democracy; I would go further and say that planning is both essentially democratic and essential to democracy. But if we are going to plan wisely we must have the participation of people in towns, villages, cities and States—in households, in business and in government.

The National Resources Planning Board and its predecessors have steadfastly worked and aided the decentralization of planning. They have urged, pleaded, and coaxed the organization and active work of state and local planning agencies. And we have come a long way in the last few years.

Our latest record shows slightly fewer local planning agencies but much more action. To the list we have added a new group of planning organizations in 300 Soil Conservation Districts, over 1,120 County Landuse Agricultural Committees, and upwards of 232 Housing Authorities, fifteen of which report they are doing comprehensive long-range city planning. Ten years ago there were only one or two state planning agencies, now there are 43. Interstate or regional planning has grown through Commissions for Interstate Coöperation, Special Investigations, Regional Planning Commissions and Committees, Drainage Basin Committees, etc. At the Federal level, planning groups in bureaus and departments are increasing in number and usefulness and the National Resources Planning Board has been recognized as a continuing agency within the President's Executive Office. The *organization* aspects of the planning movement have grown amazingly in a few years.

The *wherewithal* for organized planning is also provided nowadays in larger amounts—more evenly distributed over the country. City planning and zoning agencies, according to a preliminary tabulation of those reports received in the current local planning survey of the Resources Board, indicate that they have this year over $1,500,000 of appropriated funds plus almost $900,000 of WPA allotments. State planning appropriations are running over $700,000 per year, and WPA allocations for 1939 State Planning Projects were just under $3,000,000. We will all agree that these figures are insufficient to do the job we want the planning agencies to do—but let's find encouragement in the very substantial increase they show over the figures for ten years ago.

The *products* of our efforts are hard to measure or appraise, but they are, to say the least, encouraging. We—that is, all planning agencies —have given a large part of our attention to research, fact-finding inventories. The "survey" stage in the development of plans is always the most difficult because there is no tangible construction or act of a legislative body to point to as a record of accomplishment. It has sometimes been difficult to persuade appropriation committees that "research" as a basis for future plans and action is more important than some unplanned project whose cost would pay for all kinds of planning over ten or twenty years.

Out of this "survey" or fact-finding activity, States, counties and cities have gotten *new insight into their problems, new understanding of their resources, and growing public interest* in the ways at hand to make more effective use of those resources for the common good. The process of putting together facts and figures to give a clear picture is the first

step in planning. In military terms it is called "the estimate of the situation." Most of our big cities, many small ones, almost all of the States now have an "estimate of the situation" on which to base plans for defense and for development.

In the last ten years we have broadened the base upon which planning rests—in several directions. Perhaps the most important gain has been in the enormous *increase in the number of active participants in planning work.* We want planning done by the people who are affected. That is the democratic way. By participation in planning, citizenship is broadened in significance and meaning. It is the obligation of the free citizen of a free country to do his or her share of dreaming, planning—to see visions.

Another way in which planning has *broadened* is *in scope.* This is the same subject on which I have twice previously addressed the National Conference—so you probably don't want to hear me talk about it again. I wonder if anyone present remembers what such terms as "charting," "programming," "budgeting," "organizing," "mapping," "coursing," "projecting" or "purposing" were supposed to mean when they were added to the planning lexicon in 1933? The need for those new words grew out of the sudden expansion of planning activities in all kinds of new fields under the stress of another "emergency." Now most of those activities are recognized parts of planning. Will the present emergency produce another expansion of equal significance?

The resources with which the planners are now concerned can be thought of as divided into four general groups:

1. *Human Resources*—always first because all of our planning is presumably for human benefit in the last analysis. What can we plan for the health, morale, education, training, and vigor of the spirit of our people? Here in the United States, we boast of our inventive genius, our medical progress, our technical skills. Are they just raw materials, or do we know how to use them for our own individual enjoyment and for the common good? Admittedly, we have only begun to plan—programs of health, education, science, and morale. The President's proposal for Universal Service challenges the imagination, vision and ability of our people to a new scale and intensity of planning effort.

2. *Natural Resources*—the raw materials out of which American civilization has been and will be made—and I say "American" purposely to include the whole hemisphere. We have not yet found the balance between exploration for immediate use and profit, as contrasted to preservation for the benefit of future generations. The middle road of conservation gains more and more adherents, but like all middle roads it is a rough, uncertain way. Planning can light that road.

3. *Man-made or Facilities Resources*—our industrial plant for conversion of raw materials into useful goods, our transportation and communication systems, our power plants and transmission lines, our

houses and business buildings. Of course, the location, time of construction, and much of the operation of these man-made resources can or could be planned if we wanted to. Those we have included in definitions of "Public Works" are being more and more planned and programmed. Others are "controlled" to a limited extent through preventive planning techniques like zoning and platting. Here, I think, is the greatest opportunity for positive planning—both for the emergency and for long-range objectives.

4. *Institutional Resources*—our ways of doing things—our economic system, our governmental system, our ethics, our spiritual resources. The most important of all planning problems today seems to me to be how to defend our American civilization, ideals, liberties, and rights against totalitarian, authoritarian ideas of fascism, naziism, and communism, *without having to sacrifice our liberties while we defend them.* But, as I said at the outset of these remarks, we must face the certainty of change, we must plan for change. Problems of defense will compel changes. Competition with a different kind of economic system will inevitably cause adjustments in our own system. Intercourse between nations based on decency can't continue indefinitely if one side ignores the rules of the Marquis of Queensbury and punches below the belt. I don't pretend to know the answers. I am sure, however, that periods of great and sudden change are the "Tides in the affairs of men which taken at the flood, lead on to fortune," for the planners and the planning movement. For planners with stout hearts and keen brains now is the moment of opportunity. If we make use of this opportunity we can "ride the whirlwind." We can, if we pursue planning policies which emphasize the need for correlated facts and the discovery of the strategic points in the formulation of policy at which programs and decisions can be effected by well-informed public opinion.

One of my father's sermons is on the subject of the "Fifth Wheel." I forget the Biblical text (that is the privilege of a minister's son), but the idea is that the fifth wheel has been the customary description of an unnecessary accessory—a clumsy addition to an otherwise efficient vehicle that interferes with its use. Having fully demonstrated how useless a fifth wheel is, my father then proceeds to emphasize that it is the most important wheel in the whole automobile—it's the *steering* wheel. We cannot get along without it!

The mechanism of the steering wheel is our planning organization. The American people are behind the steering wheel. It is up to them to do the steering—to decide where we are going. The planning organization does not made the decision, but it is the tool through which the decision influences the many moving parts of the mechanism. It is a correlating device concerned with direction.

For the last seven years, following in the footsteps of previous efforts in the same direction, the National Resources Planning Board and its

predecessors have tried to bring together the facts and knowledge on which major decisions of policy must be based. We have been trying to establish that (1) Planning—Forethought, Preparedness—is essential to the orderly conduct of the public's business (as in private business); (2) Planning is the organization of facts to facilitate decision by the elected representatives of the people. It is advisory only; (3) Planning is a democratic process—involving participation in gathering facts and in suggesting solutions by all concerned. From the ground up; (4) Planning is an essential counterpart to budgeting. We cannot measure everything in terms of money. The planning agency must supply other terms of reference—"Liberty, the pursuit of happiness"—the common welfare. To be practical and useful planning must result in programs and specific proposals; (5) Planning is essential to the survival and reinvigoration of Democracy. "Without vision, the people perish."

Recent Legislation in Aid of Roadside Improvement in the Federal Highway Program

THOMAS H. MacDONALD, Chief, Public Roads Administration, Federal Works Agency, Washington, D. C.

THE Federal Highway Act of 1940 includes one or two items of particular interest to all persons concerned with roadside conservation and right-of-way improvement. H. R. 9575, Approved September 5, 1940, Sec. 11, Subsection (c) of section 1 of the Federal Aid Highway Act of 1938 (52 Stat. 633) was amended as follows:

> Hereafter the construction of highways by the States with the aid of Federal funds may include such roadside and landscape development, including such sanitary and other facilities as may be deemed reasonably necessary to provide for the suitable accommodation of the public, all within the highway right-of-way and adjacent publicly owned or controlled recreational areas of limited size and with provision for convenient and safe access thereto by pedestrian and vehicular traffic, as may be approved by the Public Roads Administration. Such construction likewise may include the purchase of such adjacent strips of land of limited width and primary importance for the preservation of the natural beauty through which highways are constructed, as may be approved by the Public Roads Administration: Provided, That not to exceed 3 per centum of the Federal-aid funds apportioned to and matched by any State under this Act may be used for the purchase of such adjacent strips of land without being matched by the States.

In this legislation, up to 3 per cent of the Federal-aid funds apportioned to and matched by any State under this Act can each year be devoted to the acquisition of limited roadside strips of varying width as determined by the character and topography of the adjoining landscape. Where it is the opinion of the State highway authorities and the Public Roads Administration that it is desirable to protect vital stretches of roadside through the preservation of the natural beauty of areas through which highways are constructed, the purchase of such approved strips adjacent to the highway may be made with Federal-aid funds to the amount stated without being matched by the States.

This will permit the acquisition of selected limited areas of bordering woodlands or other fine existing trees and tree groups, special points for turnouts and overlooks, spring sites, stream and shore frontages, and other areas of outstanding scenic and recreational value. It is the intention of the Act to encourage the preservation and control of a series of areas in order of priority over the State highway system carefully selected on the basis of complete technical landscape design analysis by each state highway department. These specially selected widenings in roadside areas are in addition to the more or less standard widths of right-of-way normally required for general highway construction purposes provided by the State as heretofore. A means is thus provided for the acquisition of areas of outstanding landscape and traffic service to supplement the normal widths of right-of-way required for regular construction and maintenance purposes.

This is a very significant step in Federal highway legislation, for Federal-aid funds have been heretofore limited to highway construction purposes and were not available for the purchase of land. Much has been written during recent years relative to the importance of providing adequate widths of right-of-way for modern traffic needs and for the protection of the roadsides of our highways. In this legislation the Federal Congress has given tangible recognition of the importance of protecting selected portions of highway frontage where analysis of existing landscape and traffic conditions render such protection desirable.

Federal recognition of the right-of-way problems is further indicated in Sec. 12 of the Federal Highway Act of 1940 which authorizes the Reconstruction Finance Corporation "to coöperate with States to finance, or to aid in financing, the acquistion of real property or interests in property (any such acquisition being herein called a 'right-of-way') necessary or desirable for road projects eligible for Federal aid under the Federal Highway Act (42 Stat. 212), as amended and supplemented." Such loan or purchase of securities by the Reconstruction Finance Corporation shall be made only after approval of the project by the highway department of the State and by the Public Roads Administration of the Federal Works Agency.

These amendments relating to highway rights-of-way are a tangible expression of the Federal interest in the problem. As evidenced by this legislation, the National Congress appreciates the necessity first of acquiring the land upon which to build the wider and safer highways which are so urgently needed. In many parts of the country, the difficulty in acquiring adequate rights of way in the proper locations is frequently a pressing problem in the Federal highway program. The serious factor has been recognized by the Federal Government in this legislation. The initiative in making use of these amendments rests entirely with the States.

Migration and Resettlement of the People

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BETWEEN July 1, 1935, and September 1, 1939, approximately 350,000 migrants entered California across the California-Arizona border in quest of employment. This estimate is, of course, merely an approximation, as it does not take into consideration those migrants who entered the State by some mode of conveyance other than automobiles or who took some route other than across the California-Arizona border. Today we know a good deal about the population characteristics of these migrants, thanks largely to excellent studies that have been made by the Farm Security Administration and the Bureau of Agricultural Economics. We know that the overwhelming majority of these people are American citizens earnestly in search of settlement, that the movement is made up primarily of families; that the heads of these families are men in their best working years eager to find new homes and new employment opportunities in California. Here, certainly, was a major challenge to planning resources in the West. The resettlement of these people presented problems of great moment and far-reaching implications. Here was an opportunity for California to bring about a better balance of rural and urban elements in its population, to achieve, perhaps, a more equitable land-settlement within the State and a fuller utilization of our rich natural resources. How has this challenge been met?

The unpleasant truth is that we have met the challenge by ignoring it. Our reactions to the issues involved have varied from outright hostility and organized opposition to a studied attempt to ignore the entire problem and to indulge in the childish pretense that it did not exist. In the meantime, however, resettlement has taken place. Hungry and destitute people cannot wait upon the indefinitely deferred action of social planners, nor can they mark time while an intelligent public opinion is formed in their behalf. In default of a plan or program for their guidance, the migrants have settled, wherever and however they could. With the exception of the guidance and direction supplied on a limited scale by the Farm Security Administration, the migrants have had to follow the dictates of chance and necessity in seeking resettlement. Far from meeting this challenge, I fear that, in the unforgettable phrase of Neville Chamberlain, we have "missed the bus."

What form, then, has this makeshift—this unplanned and undirected resettlement—taken in California? It has taken, essentially, the form of a squatting or settling on the periphery of existing communities, both urban and rural. Driven from submarginal lands, migrants have located in California on unoccupied marginal areas. To illustrate this tendency, I want to use one or two existing communities by way of reference. Bell Gardens and Garvey Acres in Los Angeles County may be taken

as examples of urban squatting. In 1934 the Bell Gardens community was virtually non-existent; today it has a population of 26,000 people. Located in an unincorporated portion of the county, the community has no locally organized fire or police protection. Local self-government is non-existent. Sewer facilities do not exist. In the years since 1934, migrants have moved into the settlement and dug in, so to speak, as they have dug in elsewhere in California. They have purchased lots—ludicrously designated as "garden farms"—at prices ranging from $200 to $375, with a few dollars down and a few dollars a month. Largely by their own labor they have built shelters. The progression in the type of shelter follows the characteristic pattern: first, tents and trailers; second, shacks or shanties; and, finally, the small one-, two-, or three-room house. Here, as elsewhere in California, the form that the settlement has taken is an eloquent tribute to the ingenuity and the resourcefulness of the people involved. They have, for example, improvised shelters out of the most miscellaneous materials. Wholly unplanned and undirected, the new Bell Gardens exists in Los Angeles today as a result of the necessity of its inhabitants and the indifference of the larger community of which it is a part. Needless to say, although the residents of Los Angeles proper do not seem to be aware of the fact, they have a new problem child on their doorstep. Garvey Acres, near El Monte, is a similar community, but, unlike Bell Gardens, where water is available from a private water company, water is not available through regular connections and the squatters have had to dig shallow wells equipped with pitcher pumps. And this quaint anachronism, mind you, exists in the heart of metropolitan Los Angeles.

The rural settlements, all squatter-like in character, are scattered throughout the San Joaquin Valley. These settlements naturally vary somewhat from community to community, depending upon whether they belong to the vintage of 1934 or that of 1939. Most of these migrant settlements, or Little Oklahomas, have come into existence since 1934. Here, again, the progression follows the usual pattern: tents, trailers, shacks, and finally, one- and two-room frame shanties. Many of these communities in the San Joaquin Valley have sprung into existence in the most unlikely localities, both with respect to employment opportunities and with respect to soil conditions. Many of them are located on wholly unproductive land. In many instances the settlers or squatters have had to purchase a share of stock in a water company to get water on the premises, and the price of the stock is frequently the equivalent of, or in excess of, the price of the lot. Lots have been sold in certain localities for $250 and $300 which agricultural commissioners have stated were not conceivably worth more than $50. Many migrant families have not even achieved the elevated status of residence in a one-room frame shack located on hard-pan. These unsettled migrants can be found in private labor camps, cheap auto and trailer camps, and a dwindling number of

roadside squatter camps. The Hoovervilles of 1931 and 1932 were bad enough, but they had about them something of the unreality and impermanence of a movie set. These new migrant communities are permanent settlements.

All of these migrant settlements, rural and urban, have certain characteristics in common. They are invariably to be found in unincorporated portions of the counties in which they are located and this fact may well serve as a social symbol. The migrants, in other words, are not part of the incorporated settlement or the established community. These new communities—crude, raw, and shapeless—impinge upon older settlements in California. This circumstance implies, and the facts justify the inference, social cleavage between the two settlements: Little Oklahoma, on the one hand, and the pretentious urbanism of the typical California city-town, on the other hand. The migrant community is usually on the outskirts of the older community and attached to it as a kind of unwanted appendage. This cleavage is so sharply defined that it can be said to involve an element of conscious segregation.

Another characteristic that these settlements have in common is the unplanned, and highly makeshift, character of the settlement itself. Your typical migrant settlement is unplanned with respect to employment opportunities, unplanned with respect to the future development of the region in which it is located, unplanned with respect to a proper utilization of land and natural resources, unplanned with respect to the type and character of construction, unplanned with respect to the extension to the community of existing social and governmental services. That these settlements have a degree of orderliness about them is a tribute to the character of the migrants, and, at the same time, a damning indictment of the social anarchy, political impotence, and community lethargy that forced these people to shift for themselves in the corners, backyards, and margins of the State. While these new settlements are not bad, considering the circumstances, they constitute potential slums. When foreign immigrants rushed into eastern industrial centers at the beginning of this century, they settled in much the same fashion; and they, like the migrants, were forced to create the slum areas which today we are endeavoring to eliminate at considerable public expense. In other words, we have permitted the pattern of rural slum areas to come into existence in California.

One highly unfortunate aspect of the entire problem is, of course, that it is much easier to direct a resettlement movement when it is in a fluid state, so to speak, than it is to uproot people once they have squatted. An extremely complicated pattern of petty vested interests has now come into existence. The owners of these shack-town equities must now be dealt with, if you please, as property owners; we have permitted them to create myriads of small-scale vested interests. We have, also, permitted another type of vested interest to come into existence.

Some of our financial institutions and our large land companies were quick to realize that they might capitalize on the migrant problem and sell at good prices land which, because of its location or lack of productive capacity, they had never dreamed could be disposed of at a profit. They have created a number of these cheap subdivisions; they have made it possible for migrants to settle in the most unlikely localities; and they will naturally oppose any governmental attempt to cope with this problem on a large scale.

Our failure to cope with the migrant problem is all the more inexcusable in view of our past familiarity with the issues involved. The problem of land settlement is an old problem in California. The problem presented by the growth of improperly located, improperly planned, mushroom communities dates from 1880 in Southern California. More than one ghost subdivision is to be found in Los Angeles and San Diego counties today. It is rather ironic to pick up a copy of the "Report on Land Colonization and Rural Credits," issued in 1916, and to realize how completely we have forgotten the mistakes of the past. In that far-off halcyon period when mass migration to California was being encouraged by every resource that could be devised, the new settler was greeted with that cordiality for which California realtors have become famous; and at least some attempt was made, by the development associations, to supply a certain amount of readily available information with respect to likely sites for settlement. The only information that we have given these latter-day migrants is that residence requirements for relief have been increased and that there are no jobs in California.

One major difficulty in California has been the defensive attitude of the local communities. Every proposal for the resettlement of migrants in this State draws forth the inevitable comment that "anything you do for these people will only encourage more to come." This type of reasoning leads, of course, to strange conclusions. If meeting human needs is to be avoided for fear of encouraging further migration, then logically we should take still further steps to make it extremely unpleasant for the migrants already in the State. One is reminded, in this connection, of Dean Swift's proposal to end the famine in Ireland by roasting the babies. Actually, of course, we don't want the migrants to starve; so we keep them alive; but like people plagued with unwanted relatives, we ask every now and then when they intend to return to the Dust Bowl. The technique, in family relations, for handling dependent relatives, is to keep them moving, from brother to sister, from aunt to uncle. This technique finds reflection in a statement made on February 21, 1940, by James Beebe, a former president of the Los Angeles Chamber of Commerce: "With regard to relief, I am convinced that California should not be called upon to make permanent provision for all of its migrant population. It is a false kindness to these people to keep them in conditions where they have no chance of employment and where their

initiative will be ultimately sapped. In other periods, the United States has had this problem to solve and has answered it by keeping unemployed people moving from community to community until they found their place in society and again became independent." I can only trust that Mr. Beebe was able to make this statement with a straight face.

Another reason why we have failed to work out a decent approach to this problem might be mentioned. We have in California our own "peculiar institution," namely, our system of migratory farm labor which is, of course, merely a reflex of our highly industrialized agricultural economy. We are almost as sensitive about this issue as Southerners used to be about chattel slavery. There are, of course, many flaws in the comparison, but, in general, it is sound. We fly into attitudes of belligerent hostility when our peculiar institution is investigated or probed and these attitudes, unfortunately, have become almost ceremonial. Any plan for the resettlement of migrants in California, no matter how cautiously it is phrased or how tentatively it is advanced, sooner or later—and generally quite soon indeed— collides with the basic realities of our industrialized agriculture and the moment this collision occurs, planning beats a hasty retreat. Governor Olson endeavored to plan for the settlement of migrants. He appointed a Commission on Reemployment, made up of some extremely able men, real social planners. Their report was issued on September 30, 1939, but no single provision of the plan recommended by the Commission is in effect today. There is an area in which planning or discussion is permissible, but it exists, so to speak, around the circumference of the problem. We are permitted to plan, and are even given some small degree of encouragement to make plans, so long as the planning is devoted to ways and means of making the existing system of migratory farm labor function more effectively than it has in the past. But any plan which has as its objective the decasualization of migratory workers runs counter to the existing *mores* and is instantly condemned. Most social planners in California have, therefore, long since concluded that in so far as working out a plan for the decasualization of migratory labor is concerned, they had better busy themselves with the intricacies of urban traffic.

As indicating the limits of permissible planning for the resettlement of migrants, I would refer to a report entitled: "Migrants: A National Problem and Its Impact on California," issued in May 1940 by the California State Chamber of Commerce. In general the committee of the State Chamber of Commerce is to be commended for the attitude reflected in the report; the report, moreover, contains much valuable and pertinent information. But the conclusions drawn by the committee are somewhat disappointing. The committee apparently felt that the problem is not one of resettling migrants in California, but of relocating migrants in Oklahoma. California, in other words, takes cognizance of the problem but graciously suggests that "efforts should be made to

provide opportunity for some of the migrants to return to agriculture in other States, preferably those from which they originally migrated." On the question of whether this suggestion is feasible or not, the report states: "Whether lands are available suitably located and of a quality adequate for such a program is a matter that can only be ascertained by study in the States of origin." Yet, in an earlier section of the report, the committee took notice of the fact that there has been a rapid trend toward mechanization in Texas and Oklahoma, resulting in extensive displacement of share-croppers, tenants, and farm workers. The balance of the recommendations for the most part is devoted to ways and means to make our migratory labor system function more efficiently.

The effect of these assumptions upon the matter of administrative policies is quite apparent. It is the policy of the Reclamation Bureau, to take an example at random, to attempt to insure a small-scale settlement on its projects. This policy assumes, it seems to me, that the pattern of the family-sized farm in agriculture is one that can be expected to survive. Yet the experience of the Reclamation Bureau, at least in Arizona, would seem to throw some doubt upon the validity of this assumption. Nor is this, by any means, an academic issue. It has important implications in so far as planning is concerned for the resettlement of migrants on lands to be brought under cultivation in connection with Grand Coulee, the East Mesa District in Imperial Valley, and the Central Valley project. Whether this excess-lands provision is to be followed on the Central Valley project will certainly have an important bearing upon the type of resettlement projects that might be planned, and their feasibility.

Or, to take another example, consider the resettlement program of the Farm Security Administration. At present greater emphasis seems to be placed upon projects of the "infiltration" type, rather than upon the development of new rural communities. Should migrants be resettled on large-scale coöperative farming projects of the type established by the FSA at Casa Grande and Chandler, Arizona, or should they be scattered about, in existing farm communities, on the infiltration theory? If you assume that resettlement must follow existing patterns, then obviously the infiltration theory will be accepted. Yet, after reading Walter Packard's brilliant testimony before the LaFollette Committee, I cannot escape the conclusion that, although the initial costs per family may be greater, the large-scale coöperative farm idea holds out the greater promise of success, particularly in California.

If you assume that existing patterns of subdividing land must be continued, then the development of such communities as Bell Gardens and Garvey Acres is inevitable under present circumstances. But if you assume that such is not the case, then other possibilities of resettlement immediately occur to mind. We have, for example, on the statute books in California the Community Land Chest Act. Although this act has

been on the statute books since 1933, not a single corporation, so far as I know, has been formed under its provisions. If you assume that the existing patterns of handling tax-delinquent land must be followed, then, naturally, you continue to hold such land for redemption or possible sale. But that this assumption is by no means valid is indicated, I believe, by reference to an act passed by the State of Arkansas on March 16, 1939, designed to make tax-delinquent lands available for resettlement purposes. If you assume that delinquent lands in irrigation districts can only be administered as they have been in the past, then naturally bondholders will not be paid, land companies will defraud the district of revenue, and productive lands will not be available for resettlement purposes. But if you assume that irrigation districts need not follow this pattern, then the irrigation districts themselves might be used as excellent instrumentalities through which to effect a resettlement program, a possibility which to date has not even been explored. If you assume that the pattern of community development which has been followed in the past must necessarily be followed in the future, then there is little real planning that can be undertaken to eliminate shack-towns in California. But if you do not share this assumption—all too prevalent in California today—then you naturally think in terms of creating a state housing authority. Thus, even the matter of the instrumentalities to be utilized for resettlement purposes is strongly influenced by assumptions of the type that I have indicated.

No considerations, however politic, should dissuade us today from examining these, and similar assumptions, in a sharp, critical light. Agriculture today is in the midst of an industrial revolution; as our College of Agriculture in California recently announced, the robots are moving into the field. Intense pressures are at work in agriculture: the pressure of population upon resources; the pressure of farm debt; the crushing impact of the weight of our entire industrial mechanism upon our agricultural economy. Those planning for resettlement of migrants can only ignore these considerations at the risk of failure. The scope that we have given to our thinking on this question is too narrow and too restricted. We need, for example, to reconsider what we mean by "resettlement." It was perhaps inevitable that the first efforts to cope with this great problem of migration caused by displacement should have taken the form of "rehabilitation" and "resettlement" programs. We were, in effect, encountering the problem on the edges of acute distress and losing sight, to some extent, of the larger question, namely, of what happens when agriculture becomes geared to the dictates of finance in a profit economy. Today, thanks in large measure to the testimony which was presented at the reopening of the LaFollette Committee in Washington in May, and to the work of the Temporary National Economic Committee, we realize that these methods are inadequate. It is not, perhaps, so much a resettlement of our distressed rural population that

we need as it is a basic reconstruction of our economy. We have gone, perhaps, as far as it is possible to go in improvising programs to meet immediate situations; in other words, as Mr. Woofter recently observed, "rational planning must supplant emergency psychosis." Resettlement, moreover, is developing a dual aspect: We are urged to settle the industrial unemployed upon part-time farms; at the same time, we are urged to adopt the same program for the agricultural unemployed. Can it be seriously contended, for example, that we can solve the problem of intermittent employment in industry and in agriculture, with its resulting insecurity and inadequacy of earning-power, by settling eight or ten million people on part-time subsistence homesteads? This type of planning, it seems to me, accepts at face value the major assumptions made by the apologists for our existing industrial order, namely, that employment must necessarily be intermittent in industry and that employment in agriculture must be necessarily insecure. This type of approach is tantamount to building hostels for the victims of a system, while the maladjustments worked by the system itself are permitted to continue without abatement. The hostels may be quite all right in themselves, but it is the system that needs overhauling. We are told, from still another quarter, that we should resettle, that is, decentralize industry. The implication of this statement seems to be that what is needed to make our industrial order function efficiently is merely to relocate population and resettle industrial sites. Here, again, reconstruction, rather than resettlement, is indicated; or, to phrase it differently, resettlement without reconstruction is not enough.

If we refuse to accept the more restrictive of these current assumptions, then we must realize that the possibilities of resettlement in the West have scarcely been explored, much less exhausted. Our defensive attitude toward migration is based primarily on a set of assumptions which we accept at face value; the attitudes, for example, that I have described, are the product of this type of thinking. Migration does not necessarily increase the ratio of unemployed to employed; the per capita distribution of income is actually increasing in the States that have shown a net increase in population through migration. We can absorb a much larger influx than we have already unwillingly received, provided, however, that we plan intelligently and that we can win for planning thought and technique a much wider scope than, up to the present, has been permitted. We must remember, also, as I have endeavored to indicate, that dynamic factors are at work in American agriculture today. We must plan in relation to these changing circumstances and the degree of success that can be achieved will be influenced by our appraisal of these factors. The timetables of social change have been accelerated; we must plan not only to meet the immediate needs of today, but in terms, also, of the reconstruction of tomorrow.

FEDERAL LANDS

NATIONAL PARKS

A Review of the Year

Prepared by the NATIONAL PARK SERVICE

DURING the past year two new national parks, two national monuments, and two historic sites were established. A national cemetery was transferred from the War Department, making a total number of 162 Federal park areas as of November 1, 1940. The new units, together with adjustments in the boundaries of existing areas, increased the total of the National Park and Monument System by approximately 737,000 acres.

New Parks

Kings Canyon National Park was established on March 4, 1940. As members of the American Planning and Civic Association know, this new national park embraces 454,600 acres of superb mountain wilderness and magnificent sequoia groves. The Act of Congress creating the park abolished General Grant National Park, making it the General Grant Grove Section of the new park. The Act also authorized the President to add to the park the Redwood Mountain area, which supports one of the finest groves of sequoias.

The principal private holdings in the Redwood Mountain tract had been withheld from logging for many years by their owners with the hope that some means might be found to preserve the forest for public enjoyment. All private lands, consisting of 4,000 acres, within the Redwood Mountain area authorized for addition to the park have now been acquired by the Federal Government. The President, consequently, on June 21 issued a proclamation which brought this famous forest into the new national park. Thus were crowned with success the efforts of conservationists for more than 50 years to achieve permanent protection for this grove.

The main point of access to Kings Canyon National Park is on the west side where a new highway built by the State of California extends up the Canyon of the South Fork to Cedar Grove. Congress did not include the Cedar Grove reclamation withdrawal within the park. The portion of Kings Canyon which lies within the reclamation withdrawal includes the principal campgrounds and center for recreational developments and public accommodations upon which the use of the park must depend. The omission of this important area from the park left it in the national forest, although it is almost surrounded by the park. Consequently, to integrate the development and administration of this area with that of the surrounding park, the National Park Service, by ad-

ministrative agreement with the Forest Service, on August 15 assumed administrative jurisdiction of the Cedar Grove area.

Since the state highway, the gateway to the park, ends at Cedar Grove, the Department of the Interior has approved the construction of a truck trail, on the grade and alignment of a permanent road, up the South Fork of the Kings River to Copper Creek. This secondary road will facilitate the trail improvement program, and will give access to the principal trails leading into the back country.

Since establishment of the park, the National Park Service has been conducting studies for the preparation of a master plan to govern the development of the area. Such plans are based on maintenance of the outstanding wilderness character of the Kings River watershed.

Isle Royale National Park in Michigan is notable among the new areas. This park was created on April 3, 1940, when the Secretary of the Interior accepted the deed to the last of the lands within the prescribed boundaries, now aggregating 133,405 acres. Located in Lake Michigan, Isle Royale with its numerous islets is a unique and outstanding wilderness area.

The Whitman National Monument, Washington, of approximately 45 acres, was established January 20, 1940, as a memorial to the heroism of Marcus Whitman, the first medical missionary on our Pacific Coast, and to his wife, Narcissa.

The Appomattox Court House National Monument, Virginia, of approximately 970 acres, created on April 10, commemorates the termination of the War Between the States.

The Manassas National Battlefield Park, Virginia, of approximately 1,604 acres, was so designated on May 10 by the Secretary of the Interior under the provisions of the Historic Sites Act of August 21, 1935. Here were fought the First and Second Battles of Manassas (Bull Run) in 1861 and 1862, respectively.

The Vanderbilt Mansion National Historic Site, in Dutchess County, New York, of approximately 211 acres, portrays a significent phase of American social, economic and cultural history typified by the great industrialists of the 1890's. The estate was presented to the American people by Mrs. Margaret Louis Van Alen, in honor of her uncle, Frederick W. Vanderbilt who built the mansion and furnished it.

The Custer Battlefield National Cemetery, of approximately 640 acres, was transferred to the National Park Service on July 1 by Executive Order. The cemetery is the site of the famous battle of the Little Big Horn River, Montana, in which Lieutenant Colonel Custer and his command of 226 were annihilated by the Sioux Indians in that fateful battle of June 25, 1876.

An area in Tennessee, Kentucky, and Virginia, including the famous Cumberland Gap, was authorized by Congress on June 11 as the *Cumberland Gap National Historical Park project.* The act provides that the

park shall not exceed 50,000 acres, and that no Federal money shall be used for the purchase of the land. The Gap is of primary historical importance as the connecting link between the Middle Atlantic States and the territory west of the Appalachian Mountains. The trail through the Gap was an important Indian route. It was later travelled by Daniel Boone, and subsequently, through it flowed the travel and transportation of the rapidly developing Nation.

Park Boundary Adjustments

Among the more important adjustments in the boundaries of existing national park areas during the past year were at *Olympic National Park*, Washington, to which 187,411 acres of magnificent forest and mountainous country were added on January 2, 1940, by proclamation of the President, and at Kings Mountain National Battlefield Park, South Carolina, which was enlarged on July 11 from 40 to 4,012 acres, in order to include all the battle positions, points of action, and historic environs of this famous Revolutionary battle.

On April 6, the area of the *Grand Canyon National Monument*, Arizona, was reduced from 273,145 to 201,291 acres. The lands excluded were returned to the public domain for administration by the Grazing Service.

Congress on June 29 changed the name of the Cape Hatteras National Seashore project to the Cape Hatteras National Recreational Area project, and provided that hunting may be permitted within certain portions of the area under such rules and regulations as may be prescribed by the Secretary of the Interior in conformity with the Migratory Bird Treaty Act of July 3, 1918.

In several important national park projects previously authorized by Congress, the following developments occurred: In the proposed Saratoga National Historical Park project, New York, the State of New York has donated 1,427 acres of State-owned lands. The 1941 Interior Department Appropriation Act made available $50,000 for the purchase of the remaining 950 acres within the proposed park.

As presently constituted, the *Kennesaw Mountain National Battlefield Site*, Georgia, consists of a 60-acre tract, which includes only a small part of the terrain on which that battle was fought. In 1935, Congress authorized the enlargement of the area and a change in its designation, when the additional lands had been acquired, to that of a national battlefield park. To date, approximately 2,591 acres have been acquired of the 3,000 acres within the proposed battlefield park boundaries.

Congressional appropriations during the past year make possible the early establishment of the Andrew Johnson Homestead National Monument, Tennessee, and the Patrick Henry National Monument, Virginia. For the purchase of the former, $44,500 was made available, and for the acquisition of Patrick Henry's Red Hill Estate, $25,000.

Parkways

The *Blue Ridge Parkway* will connect the Shenandoah and Great Smoky Mountains National Parks by means of a 485-mile scenic road over terrain averaging 2,500 feet in elevation. To date 304 miles have been completed or are under construction for grading and surfacing. A continuous paved unit of 140 miles is open for traffic between Adney Gap, Virginia, and Deep Gap, North Carolina. The 50 miles between Grandfather Mountain and Mount Mitchell is graded and will be provided with hard surfacing during the year.

The *Natchez Trace Parkway*, 454 miles in length, will connect Nashville, Tennessee, and Natchez, Mississippi. The parkway follows the general course of the old Natchez Trace, an old Indian trail, and an important route in early American history. Since work was started in 1937, 85 miles have been completed or are under contract.

Protection and Use of the National Park System

Visitors to national parks and monuments during the 1940 travel year totaled 16,741,855. This is ten times the number of visitors in 1920 and five times that in 1930.

Congressional appropriations for administration, protection and improvements for the fiscal year 1940 amounted to $13,557,000, or approximately half those of the previous year. Revenues received from the areas amounted to $1,929,013, as compared with $1,567,333 for the preceding year.

Physical Improvements. Owing to a curtailment of construction funds, few new projects other than buildings were started, and money was allocated for the continuation of only the most urgent road projects. The sum of $3,500,000 made available through the road and trail appropriation in the Interior Department Appropriation Act provided for the continuation of grading already commenced on a few park roads and approach roads, and for surfacing, guard rail and post construction on a number of other roads.

The physical improvement program initiated in 1938 by the $2,000,000 PWA allocation is practically complete. Included in this program were 100 urgent engineering projects for extensions or replacements to existing water supply, sewage and garbage disposal and electric power and telephone systems. Also completed under the program were a number of buildings, such as the administration buildings at Great Smoky Mountains and Shenandoah National Parks.

Forest Protection Activities. Notwithstanding an unusually big year, forest fires in the entire national park system burned only 2,920 acres, one half of which was due to the Astringent Creek fire in Yellowstone National Park, which started by lightning. As in previous years, fire protection training on the part of all the Service's protection personnel was stressed. Additional fire lookout structures were constructed at

Yellowstone, Great Smoky Mountains, and in Mesa Verde National Parks. Lookout towers were also erected in five areas. Additional fire lookouts are now under construction in four national parks and two national monuments.

In the way of insect control, encouraging progress was made toward controlling the beech scale at Acadia National Park, an insect which threatens the destruction of unprotected beech forests in the East. In the Rocky Mountain region the effective control work against the Black Hills beetle and the mountain pine beetle resulted in improved forest conditions. In the national parks of the Pacific Coast States, the advance of the white pine blister rust to the sugar pine forests of California has created a difficult problem. During the year initial eradication of ribes was accomplished on 31,480 acres in the western States, bringing the total eradication to 15 per cent of the area that must be dealt with in western national parks.

During the year forest nurseries were operated in Sequoia, Shenandoah, Great Smoky Mountains and Yellowstone National Parks. About one and three quarter million forest seedlings were planted in the parks.

Use and Development of Historic Areas

During the past year approximately 7,000,000 people coming from every State in the Union, and from many foreign lands, visited the national historical parks and monuments. The events that took place in these areas and the significance accorded them by historians and military experts were interpreted by a staff of 44 ranger historians.

Among the outstanding developments in the historical areas was the construction at the Statue of Liberty National Monument of an administration building of gray stone, harmonizing with the Statue. At the Morristown National Historical Park in New Jersey, the Ford Mansion occupied by Washington, was rehabilitated. The reconstruction of Derby Wharf and the central wharf at the Salem Maritime Historic Site in Massachusetts was completed. At Fort Laramie National Monument, Wyoming, the historic officers' quarters known as Old Bedlam were reroofed and the porch restored.

In the way of developments in archeology at Jamestown, the foundation of one of the earliest brick structures in the United States was excavated, and a large part of the 17th century shore line was determined. Two units of the Museum building at the Ocmulgee National Monument were completed to house and display the extensive collection of Southeast artifacts excavated during 1933–1939.

Conservation of Archeological and Historic Resources. Since 1936 the Service has been conducting a Nation-wide survey of historic sites for the purpose of determining which are of sufficient significance to warrant national recognition. This survey has been carried on in accordance with a chronological thematic program. Reports on 17th and 18th

century French and Spanish sites, and Colonial Dutch and Swedish sites have been completed. In the field of archeology, preliminary reports were prepared dealing with "Early Man in North America," and on "Historic Sedentary Agricultural Groups." A survey of archeological areas has been made in coöperation with Harvard, Columbia, Michigan, Louisiana, Tennessee, Alabama and Georgia Universities.

The Historic American Buildings Survey, which is carried on through a permanent working agreement with the Fine Arts Division of the Library of Congress and the American Institute of Architects, added substantially during the past year to its permanent graphic record of noteworthy examples of architecture in the United States and its possessions prior to 1875. The H.A.B.S. collection on file in the Fine Arts Division of the Library of Congress includes more than 18,600 measured drawings and 20,200 architectural photographs, which are in frequent use by architects, archeologists, historians, students, and libraries.

Interpretative Services and Scientific Research

The interpretive work was carried on in the field last year chiefly by 34 naturalists and 107 ranger naturalists employed on a seasonal basis. The Service's visual education activities were conducted in over 100 museums, and some 25 trailside exhibits. The attendance at the museums was nearly four million.

Research in the biological field emphasized studies dealing with the natural balance between species, both of plants and animals, such as the relations between wolves, sheep and caribou in Alaska, bighorn sheep and burros in Death Valley, and the coyote problem in several areas. The annual censuses of park wildlife were also made.

Research in the geological field has been varied. Observations, for instance, were made on the following long-term projects: the annual glacier measures to determine the changes in the ice caps in the western mountains; the thermal observations at Yellowstone which throw light on the behavior of the geysers; and the earth-tremor recordings at Lassen Volcanic and Hawaii National Parks, which are useful in interpreting volcanic activity.

Wildlife and Fish Management

The wildlife research and advisory functions of the National Park Service have been transferred by order of the Secretary of the Interior to the Bureaus of Biological Survey and of Fisheries (recently combined as the Fish and Wildlife Service). Personnel of the Washington office and field biologists in general administrative and research work, were shifted to the Biological Survey on December 4, 1939, while the two employees specializing in fisheries work were moved to the other bureau on December 18. General functions of the various positions have continued as previously, although the activities are directed through different administrative channels.

Animal relationships continue to be the major wildlife research project, field work now being centered upon the wolf–sheep problem in Mount McKinley National Park. In October, 1939, a closer coördination between all research agencies working on bighorn in the Rocky Mountain States was effected through an agreement between the National Park Service, the Bureau of Biological Survey, the Forest Service, and the States of Colorado, Wyoming and Idaho. Other activities included an inventory of the botanical resources of Mount McKinley Park, through coöperation of the Universities of Wyoming and Alaska, and a preliminary survey of wildlife at the Channel Islands, Capitol Reef and Joshua Tree National Monuments.

Improvement of range conditions through regulations of large herbivorous species and through reductions in grazing of domestic stock continues to be the chief wildlife management activity in certain areas of the national park system. Improvement in range overstocked with deer was effected. Notable progress was also made in several national parks in the reduction of grazing by domestic stock. As a result of an agreement between the National Park Service and the Grazing Service, grazing privileges at the Carlsbad Caverns National Park addition, Grand Canyon and Zion National Monuments and Dinosaur National Monument addition are being handled by field men of both Services on the basis of gradual reduction and eventual elimination of grazing.

Heavy fish plantings in the past year in accordance with scientific plans, assured the maintenance of excellent fishing. Over 14,000,000 grayling were planted in Yellowstone alone during 1940. Hatchery and rearing facilities have been improved at Sequoia and Glacier National Parks, and improvements in egg-collecting stations were made at Yosemite and Yellowstone.

The United States Travel Bureau

In 1920, Stephen T. Mather, the first director of the National Park Service, recommended the establishment of a travel bureau. On July 11, 1940, the President approved H. R. 6884 "To encourage travel within the United States," and thus for the first time since its establishment in 1937 with emergency funds, the permanent existence of the bureau was assured and long-range planning made practicable. Estimates of appropriations necessary to carry on the work of the bureau during 1941 under this Congressional authority have been forwarded to the Bureau of the Budget. Meanwhile the bureau is being financed with emergency appropriations.

The Travel Bureau serves as a coördinating agency for public and private organizations concerned with the development of recreational travel. Its monthly Official Bulletin now goes out to a request list of almost 7,500 individuals and organizations. Among the studies completed by the Bureau in the last year was a five-year tabulation of the

retail expenditure of recreational travelers in the United States. The study showed that such expenditures rose 26 percent from 1935 to 1939, and totaled for that period the enormous sum of $26,000,000,000.

Coöperation with the States

The National Park Service continued its coöperation with the States and many political subdivisions in planning and developing a definite park and recreational plan for the Nation. This has been done principally through its joint participation with them in supervision of Civilian Conservation Corps work on their park and recreation areas. As a result of such coöperation, the States which have recently entered the park field are assuming increased responsibility, chiefly by a greater degree of participation in planning and contributions to the costs of adequate development.

During the past year, the Service, with a quota of 310 CCC camps in the Continental United States, continued its broad program of conservation and development on 90 national parks and monuments, 22 recreational demonstration areas, and 198 state, county and metropolitan parks. A few of the more outstanding items, completed or nearly so by the CCC enrollees, are the public campgrounds and related facilities at Smokemont in the Great Smoky Mountains National Park, trailside shelters along the Appalachian Trail, the amphitheatre and telephone system in Mammoth Cave National Park, reconstruction of the historic Chesapeake and Ohio Canal between Washington and Seneca, Maryland; and the extension of facilities for winter sports in both national and state parks.

Under a coöperative agreement with the Works Project Administration, the Service last year reviewed and advised on State, county and municipal park and recreation area applications submitted to the WPA involving a total of approximately $100,000,000.

The Service also supervised during the year, a monthly average of 6,614 workers engaged in 83 park development and relief projects.

The Park, Parkway and Recreational-Area Study

During the past year, reports on state-wide recreation plans and programs have been prepared in Arkansas, Florida, Maine, Massachusetts, New Mexico, Texas, Rhode Island, and Washington, making a total of 30 state reports completed as part of the coöperative study being made by the Federal Government and the States to formulate an adequate and comprehensive recreational program for the States and the Nation.

The Service's second Nation-wide report on recreation, "A Study of the National Recreational Problem," now being printed, is based to a considerable extent upon the information made available through the State studies.

Dedication of the Great Smoky Mountains National Park, September 2, 1940

EDITOR'S NOTE.—The dedication of the Great Smoky Mountains National Park on September 2, 1940, recalls the long line of events which led to the realization of a dream. In February of 1924 Secretary of the Interior Hubert Work appointed the Southern Appalachian Park Commission to recommend a national park in the Southern Appalachians. The Commission consisted of Representative Henry W. Temple, William C. Gregg, Glenn S. Smith, William A. Welch, and Harlan Kelsey. The Commission reported recommending the Great Smoky Mountains and the Shenandoah National Parks. In February of 1925, Congress passed a bill authorizing the Secretary of the Interior to determine boundaries. The Secretary appointed the same Commission to recommend boundaries. Following the recommendations of the Commission, Congress passed an Act on May 22, 1926 to provide for the acquisition of the park. In April of 1925, Tennessee had by act of the legislature, created the Tennessee Park and Forestry Commission and in September of 1927 the Legislature authorized a bond issue of $1,500,000 to supplement the $660,000 of a former bond issue and private subscriptions, for the purchase of land. On February 25, 1927, the North Carolina Legislature passed an Act authorizing a bond issue of $2,000,000. During all these negotiations, Col. David C. Chapman in Tennessee and Mark Squires in North Carolina labored to raise the money necessary to purchase the area. Arno B. Cammerer represented the National Park Service, and as a result of his recommendations, early in 1928, the Laura Spelman Rockefeller Fund made a grant of $5,000,000 for the purchase of land. It was only after many delays, lengthy lawsuits and court proceedings that the purchase of the park was managed. To those here mentioned and many more who labored unselfishly for the park should go the thanks of a grateful people. We are glad to present here the addresses of the officials who took part in the dedication of the Great Smoky Mountains National Park in 1940.

ADDRESS OF THE PRESIDENT OF THE UNITED STATES

Here in the Great Smokies, we meet today to dedicate these mountains, streams, and forests to the service of the American people. We are living under governments which are proving their devotion to national parks. The Governors of North Carolina and of Tennessee have greatly helped us, and the Secretary of the Interior has today ready for dedication two more Parks—Kings Canyon in California and the Olympic National Park in the State of Washington—and soon, I hope, will have a third, the Big Bend Park in Texas.

There are trees here that stood before our forefathers came to this continent, there are brooks that still run as clear as on the day the first pioneer cupped his hand and drank from them. In this park, we shall conserve the pine, the red-bud, the dogwood, the azalea, the rhododendron, the trout and the thrush for the happiness of the American people.

The old frontier, that put the hard fibre in the American spirit and the long muscles on the American back, lives and will live in these untamed mountains to give future generations a sense of the land from which their forefathers hewed their homes.

The hewing was hard. The dangers were many. The rifle could never be far from the axe. The pioneers stood on their own feet, shot their own game and fought off their own enemies. In time of accident or misfortune, they helped each other. In time of Indian attack, they stood by each other.

Today we no longer face Indians and hard and lonely struggles with nature—and also—we have grown soft in many ways.

If we are to survive, we cannot be soft in a world in which there are dangers that threaten Americans—dangers far more deadly than were those the frontiersmen had to face.

The earth has been so shrunk by the airplane and the radio that Europe is closer to America today than was one side of these mountains to the other when the pioneers toiled through the primeval forest. The arrow, the tomahawk, and the scalping knife have been replaced by the airplane, the bomb, the tank, and the machine gun. Their threat is as close to us today as was the threat to the frontiersmen when hostile Indians were lurking on the other side of the gap.

Therefore, to meet the threat—to ward off these dangers—the Congress and I are establishing by law the obligation inherent in our citizenship to serve our forces for defense through training in many capacities.

It is not in every case easy or pleasant to ask men of the Nation to leave their homes and women of the Nation to give their men to the service of the Nation. But the men and women of America have never held back even when it has meant personal sacrifice on their part if it is sacrifice for the common good.

The greatest attack that has ever been launched against freedom of the individual is nearer the Americas than ever before. To meet that attack we must prepare beforehand—for preparing later may and probably would be too late.

We must prepare in a thousand ways. Men are not enough. They must have arms. They must learn how to use those arms. They must have skilled leaders—who must be trained. New bases must be established to enable our fleet to defend our shores. Men and women must be taught to create the supplies that we need. And we must counter the agents of the dictators within our country.

There is, moreover, another enemy at home. That enemy is the mean and petty spirit that mocks at ideals, sneers at sacrifice and pretends the American people can live by bread alone. If the spirit of God is not in us, and if we will not prepare to give all that we have and all that we are to preserve Christian civilization in our own land, we shall go to destruction.

It is good and right that we should conserve these mountain heights of the old frontier for the benefit of the American people. But in this hour we have to safeguard a greater thing: the right of the people of this country to live as free men. Our vital task of conservation is to preserve the freedom which our forefathers won in this land, and the liberties which were proclaimed in our Declaration of Independence and embodied in our Constitution.

In these centuries of American civilization, greatly blessed by the bounties of nature, we succeeded in attaining liberty in Government

and liberty of the person. In the process, in the light of past history, we realize now that we committed excesses which we are today seeking to atone for.

We used up or destroyed much of our natural heritage just because that heritage was so bounteous. We slashed our forests, we used our soils, we encouraged floods, we over-concentrated our wealth, we disregarded our unemployed—all of this so greatly that we were brought rather suddenly to face the fact that unless we gave thought to the lives of our children and grandchildren, they would no longer be able to live and to improve on our American way of life.

And so in these later years, we have tried sincerely and honestly to look ahead to the future years. We are at last definitely engaged in the task of conserving the bounties of nature, thinking in terms of the whole of nature. We are trying at least to attain employment for all who would work and can work, and to provide a greater assurance of security throughout life for the family.

From hard experience we know that the process is a long one, but most of us realize that if we can continue our effort without serious setbacks, the ideals of the American way of life can and will be attained by working everlastingly for the good of the whole and not for any one privileged group.

So, from within our own borders, liberty through democracy can, I believe, be preserved in future years—if we want to preserve it.

But there is a second danger—a danger from without. I hope, for example, that one hundred years from now the Great Smoky National Park will still belong in practice, as well as in theory, to the people of a free nation. I hope it will not belong to them in theory alone and that in practice the ownership of this park will not be in the hands of some strange kind of Government puppet subject to an overseas overlord. I hope the use of it will not be confined to people coming hither on Government specified days and on Government directed tours. I hope the trees will not be slaughtered by the axe in order that a Government may conduct wars of aggression against other nations. I hope that roads and paths and trails will still be built in the cause of the liberty of recreation, and not confined to the ulterior purposes of a war machine controlled by an individual or an oligarchy.

That there is a danger from without is at last recognized by most of us Americans. That such a danger cannot longer be met with pitchforks and squirrel rifles or even with the training or the weapons of the war of 1917 and 1918 is equally clear to most of us Americans.

It is not a change from the American way of life to advocate or legislate a greater and a speedier preparedness. It is a positive protection to the American way of life. We know that in the process of preparing against danger we shall not have to abandon and we will not abandon the great social improvements that have come to the American people

in these later years. We need not swap the gain of better living for the gain of better defense. I propose to retain the one and gain the other.

But to conserve our liberties will not be easy. The task will require the united efforts of us all. It will require sacrifices *from* us all.

The pioneers survived by fighting their own fight and by standing together as one man in the face of danger. If we, their descendants, are to meet the dangers that threaten us, we too must be ready to fight our own fight and stand together as one man. In hours of peril the frontiersmen, whatever their personal likes and dislikes, whatever their personal differences of opinion, gathered together in absolute unity for defense. We, in this hour, must have absolute national unity for total defense.

What shall we be defending? The good earth of this land, our homes, our families—and far more. We shall be defending a way of life which has given more freedom to the soul and body of man than ever has been realized in the world before, a way of life that has let men scale whatever heights they could scale without hurting their fellows, a way of life that has let men hold up their heads and admit no master but God.

That way of life is menaced. We can meet the threat. We can meet it in the old frontier way. We can forge our weapons, train ourselves to shoot, meet fire with fire, and with the courage and the unity of the frontiersmen.

It is our pride that in our country men are free to differ with each other and with their government, and to follow their own thoughts and express them. We believe that the only whole man is a free man. And we believe that in the face of danger, the old spirit of the frontiersmen which is in our blood, will give us the courage and unity that we must have.

We need that spirit in this hour. We need a conviction, felt deep in us all, that there are no divisions among us. We are all members of the same body. We are all Americans.

The winds that blow through the wide sky in these mountains—the winds that sweep from Canada to Mexico, from the Pacific to the Atlantic—have always blown on free men. We are free today. If we join together now—men, women and children—and face the common menace as a united people, we shall be free tomorrow.

To the free people of America, I dedicate this Park.

Remarks by Secretary of the Interior Harold L. Ickes

It is a sobering thought that the United States is one of the few major countries in the world today where such a gathering as this is possible. We have, indeed, much to be grateful for. We are grateful for the wide oceans that still separate us from the "exterminating havoc of one-quarter of the globe," as Jefferson called it. We are grateful for being free men, free to think and free to act, free to express ourselves as

we see fit, and free to apply our energies, not to destruction, but to enterprises that are intended for the enjoyment and the happiness of our fellow men.

National parks are such enterprises. Last year some fifteen million Americans visited the national parks. This is more than the mobilization figures reported for all of the armies of war-torn Europe. The millions of Americans who come to their national parks constitute an army of happy and peaceful and free citizens. They are bent upon the fulfillment of life and not the taking of life. For this, too, we are grateful.

National parks are authentic, democratic, American products. Only in this Republic could they have been conceived on such a scale, in such numbers, and in so broad and democratic a spirit. God gave us rare treasures of natural beauty, and we Americans are doing our humble best to be worthy of the gift by preserving and cherishing all that we can of it for the enjoyment and inspiration of all of the people.

Of one of the Roman emperors it was said that he found Rome a city of brick and left it a city of stone. Grateful historians will record that President Franklin D. Roosevelt has been a master-builder of our national parks. Under him, and due to his personal interest, the national parks have more than doubled in number. Their popularity is evidenced by an increase from some 3,000,000 visitors in 1933, to about 15,000,000 in 1939.

In 1933, when this Administration entered upon its duties, there were but one fully functioning scenic national park and two historic areas east of the Mississippi River. The Great Smokies National Park was then but a gleam in some planner's eye.

Today we have fine scenic national parks in the East—this glorious wilderness of the Great Smokies; Acadia in Maine; Shenandoah in the Blue Ridge of Virginia; Isle Royale in Michigan; and Mammoth Cave in Kentucky, which we hope will be ready for dedication next year. Besides, there are a number of other Federal areas, such as historic and military parks and national monuments.

Each of these parks has been conceived in the democratic spirit of coöperation by all, service to all, and enjoyment for all. Millions of private funds have gone into the creation of these parks, in addition to appropriations by the Federal Government and by the interested States.

Once the potentialities of the Great Smokies as a national park area became apparent, enthusiastic workers joined in the cause. State officials in both North Carolina and Tennessee, as well as private citizens, offered their services and their time. Their enthusiasm attracted the interest of people from other States. Prominent among these was Mr. John D. Rockefeller, Jr., without whose especially generous coöperation the park would probably still be in the project stage. We regret deeply that Mr. Rockefeller cannot be here today, but I want to read to you a message from him.

As president of The Laura Spelman Rockefeller Memorial when it pledged five million dollars to the Great Smoky Mountains National Park and as the son of my mother in whose memory the gift was made, I rejoice profoundly in the opening of this great area of outstanding natural beauty for the permanent enjoyment of the people of these United States. May the beautiful spirit of my mother, who was a loyal and devoted wife, a wise and loving parent and an earnest Christian woman, descend upon those who visit these mountain fastnesses, who find refreshment in the shaded valleys, and new courage by the side of the sparkling streams! May the peace of the Father of mankind, the Creator of all this beauty, in Whose service my mother's life was dedicated, dwell in their hearts and make beautiful their lives!

The Great Smokies National Park has, indeed, been fortunate in its friends. Mr. Rockefeller has been one of its great friends. Governor Hoey has been another. He has given the park eager and practical coöperation. He has a wide reputation as a friend of conservation in general—a true conserver of natural beauty and a promoter of human welfare.

Another great and sincere friend of this park and of the conservation policies of the Federal Government is Governor Cooper. He has been a loyal supporter of soil conservation, of TVA, of Rural Electrification. He believes in the full development of our natural resources, consistent with their proper conservation, to the end that life may be made richer for the people of Tennessee and the people of the United States as a whole.

Address by Governor Hoey of North Carolina

North Carolina is happy to join her fair daughter, Tennessee, in welcoming the great President of this mighty Republic to this high eminence for the purpose of dedicating the Smoky Mountain National Park to public use and service. The multitude assembled here to honor the President and witness the dedication is likewise cordially welcomed. Welcome also are the Governor of Tennessee and Secretary of the Interior Harold Ickes.

America has been centering her energies in the development and conservation of her natural resources and the preservation of her vast forests against the day of the nation's need and for the pleasure and profit of all the people. Similarly she has been conserving her human resources and marshalling her man power for the building of a greater citizenship and the moulding of a finer civilization.

Amid her greatest advances in this inviting field of public service it becomes necessary to give increased attention to protective measures looking to the preservation and safeguarding of her greater treasure in liberty and freedom, and the thought of the nation today is of national defense and national unity.

North Carolina wishes me to pledge her 3,500,000 people in unbroken solidarity to the cause of real Americanism. There can be no difficulty in defining that term. The Constitution and Bill of Rights furnish the definition and the interpretation. It means those highly treasured

guarantees of the right to life, liberty, the pursuit of happiness, and the right to worship God according to the dictates of one's own conscience. It means belief in the form and type of government which gives full protection to every individual in both his rights of person and his rights of property. It recognizes worth and merit, values independence and self-reliance, encourages economy and frugality and rewards intelligence and industry on the part of every citizen. It gives equal justice to all groups and requires obedience of the law from organizations as well as individuals. Real Americanism is not determined by place of birth or residence, whether foreign or native born, nor by race or nationality.

Genuine Americanism is a thing of the spirit and in this hour of crises it must mean whole-hearted allegiance and unswerving devotion to our country, to its ideals, its high purposes, and its manifest destiny. This period calls for unity in thought and action and will not admit of divided allegiance in sympathy or loyalty to our common country.

The people of North Carolina believe in full and complete national defense on land and sea and in the air. They believe in requisitioning the necessary men and means to accomplish the desired end of maintaining our own freedom and independence and saving our own land from the blight of war and the destruction of the American way of life. In order to achieve this result they are willing to travel the pathway of sacrifice.

North Carolina also believes that we have temporized with disloyal elements too long already. My personal view is that the time has come when the Congress of the United States ought to outlaw the Communist party, the Nazi bund, and every other organization which seeks the overthrow of our government. I believe in free speech but that freedom should not extend to organizations which admittedly owe first allegiance to a foreign power and seek the destruction of the government under which they claim protection.

This dedication of the vast forests in these majestic mountains of North Carolina and Tennessee should furnish the occasion for a fresh dedication of every citizen to the tenets of our faith as a nation and to the high purposes of our Republic as we battle for the preservation of our heritage of liberty and freedom. We become crusaders for the spirit of democracy and for national unity and there should be no quarter given to fifth columnists anywhere in this free land.

We hate war. We believe in peace and love it. We love peace so well that we are willing to fight to preserve it, if need be. We believe the best security for peace is full and complete preparation for national defense.

Mr. President, North Carolina welcomes you most heartily to this high altitude of the mountains for the performance of the pleasant task of dedicating this great park, and amid the majesty of these eternal hills I assure you of the united support of all North Carolina as you lead this nation in preparation for our full national defense. And when peace comes to a warring world, as it will sometime, I covet for America

the moral and spiritual leadership under God for the distracted peoples of the earth and a major share in the task of rebuilding the wrecked civilization of the world.

Address of Governor Cooper of Tennessee

Tennessee gladly meets with her mother state, North Carolina, in this pleasant hour when a great national resource is dedicated by a great American—President Franklin D. Roosevelt.

If you, Mr. President, as do many others, believe with the Poet Kilmer that a tree may be lovelier than a poem, then here is a vast forest wonderland of beauty surpassing even the beauty of poetry for all Americans to enjoy.

Beneath these veil-like mists of the Great Smokies that the mountain-dwelling Cherokee Indians called the Great Smoke are 129 varieties of native trees, and 18 non-native trees. There are 200,000 acres of virgin hardwoods in this range, one of the largest stands left in America. The lower slopes are covered by beech forests. There are fine stands of yellow-wood, or "gopher trees," which, according to tradition among some of the mountain people, was the wood out of which Noah's Ark was constructed. Some of the red spruce here are more than 400 years old. Maple, oak, buckeye, basswood and chestnut trees reach tremendous growth in the Great Smoky Mountains; and many shrubs of these peaks attain treelike dimensions. The yellow poplar or tulip tree often attains a height in this area of 200 feet, and a diameter of nine feet. More commonly found are the mountain laurel, sometimes towering to forty feet.

William Bartram, the first botanist to report in detail his findings in the Great Smoky Mountains, listed 3,710 varieties of plant life, including mosses, liverworts, fungi, lichens, and ferns; and 1,500 species of higher plant life. In summer months, the kaleidoscopic colors of the Great Smokies are brought out by the violets, trillium, trailing arbutus and phlox; the azalea, wild tiger lilies, laurel and rhododendron. Geologists tell us that here we have the oldest mountain formation on the North American continent, and one of the oldest known to the world.

The park area is 54 miles long, 19 miles wide, contains more than 400,000 acres, and 16 of its peaks are more than 6,000 feet in height.

Within a 600-mile radius of the Great Smoky Mountains live two-thirds of the people of America. This is among their greatest recreational assets. They are but a day-and-a-half drive away at most, or an overnight train ride, or an hour or so by plane. The park holds a major place in the entire recreational program of America.

But scenic beauty and recreational features are not the only assets of the Great Smoky Mountains. They play a gigantic, silent rôle in National Defense, Mr. President. Along with adjacent national forests, this park,

by the preservation of its forests, conserves the normal watershed of the Tennessee River, which, with its TVA power and navigation development, is a strategic factor in all considerations of our national defense. This range is a natural barrier to an enemy, even in days when fighting is largely from and in the air. This is natural protection for inland country. These towering peaks contribute to the status and security of the Tennessee Valley as "the inner citadel of the nation."

Tennessee, realizing this fortunate relationship in the development of a favored, natural region, has, under direction of the State Planning Commission, organized the "Great Smoky Mountains Regional Planning Commission," on which today I want to offer President Roosevelt and Governor Hoey honorary membership. This regional commission is looking toward years which we shall not see, but which shall find the full potentialities of the region realized in long-range planning for the happiness and security of our people.

There are some immediate plans projected by this commission—including a system of roads which will make the park easily accessible from any approach. Recreational facilities to supplement those already provided are being planned. Wildlife restoration is another objective of this development program, one already bringing definite results.

Before establishment of the park, wildlife was being tragically depleted in this area. Now we note the satisfactory return of bears, deer, smaller furred mammals and birds. There are 180 varieties of birds now listed in the Great Smokies, and further studies are under way. Hunting and trapping are prohibited; but during the fishing season, there are 600 miles in these mountains of what many sportsmen say are the finest trout streams in America.

Unlike the great national parks of the West, the Great Smoky Mountains National Park is a gift of the people to the Government, not a gift of the Government to the people. The western parks were set aside from the Public Domain, whereas the lands of the Smoky Mountains Park were privately owned, and purchased with private and state funds, and deeded to the Government. Nearly $5,000,000 was raised by private donations from citizens, and from city and state appropriations. This sum was matched by the Laura Spelman Rockefeller Memorial Foundation.

This dedication today is the climax of a dream almost 50 years old.

With extreme pleasure, Tennessee joins in this ceremony of formal dedication of a great gift of the people to their fellow Americans.

National Park Service Policy Concerning the Colorado River Basin

A statement sent by ARNO B. CAMMERER, Director of the National Park Service, to Governor Blood of Utah.

RECREATIONAL resources of the Colorado River Basin are internationally known. Any plan for the coördinated development of the Basin's resources must recognize that asset. Coördinated development of the Basin should provide opportunity for the maximum use of each resource.

It is recognized that available water and power are fundamental in the Basin's growth. It is recognized, also, that mineral, forest, and range resources must be utilized. The studies now being conducted should result in a wise exploitation of all of the resources, so that each development would be supplemental to the others in the Basin's economy.

It would not be justifiable to advocate the exploitation of one resource without regard for such exploitation upon the others. Overgrazing, for example, that results in soil erosion, floods, impoverishment of forests, range, and all other affected resources, cannot be advocated as wise land use. There must be a correlation of the uses, if the maximum benefits are to be achieved.

It is upon this general basis that the National Park Service offers coöperative assistance in the drainage basin studies.

We urge that in all plans for development of the Basin's resources, the recreational potentialities be evaluated. It should be possible to classify each resource according to its most profitable use. An area, such as the Grand Canyon National Park, is unquestionably of primary importance for its recreational, or inspirational, value and it has been so classified by action of the Congress. Secondary uses of the Grand Canyon National Park, such as the development of power and reclamation projects within it, would detract from the primary use and must, therefore, be opposed.

On the other hand, the Boulder Dam region is primarily valuable for water control purposes and the area has been so developed. In that development, however, recreational and wildlife values have been recognized and are being developed for public benefit. Because of this recognition of the several resources, it is reasonable to forecast that Lake Mead will become one of the major recreational assets of the Colorado River Basin.

The proposed Escalante National Monument embraces one of the little known but most spectacular scenic regions in the United States. The mineral and grazing resources of the area have not been proven to be significant. Its water control potentialities may prove to be important. Its recreational assets can become a significant factor in the economic development of the Basin. It may be possible that the water control

and recreational factors can be developed coincidentally. The plans eventually formulated should rest upon a carefully considered appraisal of all the resources involved, and the relative importance of each should be determined.

The exploitation and impairment of great, publicly owned scenic resources for the sole purpose of reducing the cost of a water control project is questionable public policy. If important recreational resources are involved in a water control project, the additional expenditure required for the protection and development of those resources should be considered as a legitimate expenditure.

An open mind is essential to the success of the Basin studies and the National Park Service wishes to coöperate on that basis.

It is well known that studies are now being conducted to determine the feasibility of a transmountain diversion project to bring water from the Green River in the Dinosaur National Monument region to the agricultural lands of the Great Salt Lake basin. The National Park Service realizes that the development and utilization of water and power resources are of vital importance to the Basin's industrial stability. The Service believes that the merits of such a project, and the effects of it upon the recreational utility of the national monument, likewise, should be considered upon the basis of facts produced by these studies. It is believed that reconciliation of the numerous interests can be achieved by this method.

With reference to the proposed Escalante National Monument, there are constructive as well as destructive ways in which the recreational development of that area may be handled. No public benefit will result from the refusal to recognize the dominant resources of this publicly owned area. There is no question that the area is one of the most scenic regions in the United States. The State of Utah and the public generally can profit by the power development and utilization of those scenic resources. There appears to be no question, also, that meritorious projects for the development of water and power resources of the Colorado River should be undertaken. It may be many years, however, before the appropriate means for such water control projects can be found. Does the State of Utah want these scenic resources to remain unused or to be despoiled during that intervening time?

Legislative measures could be sought, and widely supported, to establish the Escalante area as a national recreational area, with adequate provisions assuring future development of water and power resources, when such projects are found feasible and duly authorized. Provision could be made, also, for prospecting and mining. Such legislation could prevent damage to a major state asset, the recreational resources.

National Parks and New World Idealism

ARNO B. CAMMERER, Director of the National Park Service, Washington, D. C.

EDITOR'S NOTE.—Arno B. Cammerer, who was with the National Park Service almost from the beginning and was Director from 1933 until June 1940, when he resigned, gave this excellent address on May 13, 1940, before the Eighth American Scientific Congress. We are glad to present Mr. Cammerer's concept of national parks to the readers of the AMERICAN PLANNING AND CIVIC ANNUAL. The national-park idea originated in the new world.

PARKS are an expression of maturity and restraint. They are an indication that people have begun to look outward and to see with perspective. With that perspective, it is seen that in our struggle for existence we can afford to preserve some of the native beauty of our land and to use it.

The park concept is clearly the product of a balanced mind—a mind that sees in a waterfall something more than potential horsepower, that sees in a giant forest something more than lumber, or that sees in a flowering mountain meadow something more than a sheep pasture, and, having seen, does not desire to exploit it for private gain.

The national-park idea is a consistent part of the new world idealism. Its development need not be limited, except by our vision, and our generosity. If we are far-seeing enough, park benefits can become an international heritage of the Americas. The native beauty of the land and the homespun cultural fabrics of each different country can become the common heritage of us all. The nature reservations and historic shrines of all the American countries can be united, not only by international parkways and peace parks, but by the international language of the park idea, until there is a Pan-American Park System covering the continents from southern Chile and Argentina to Alaska and Canada.

Nature has given us the snow-clad cordilleras reaching from Mount McKinley to Nahuel Huapi, the white line of breakers that rims the Americas, clean rivers, forests and plains teeming with wildlife, the fertile soil, and other resources in great abundance. Over it all, and made of it, is the scenic mantle, the element of natural beauty, which was not recognized as being a resource by the pioneers but which has come to be recognized as one of the indispensable resources of our civilization. This scenic and recreational mantle of the Americas is wearing thin; moths, fire and acids have eaten it full of holes, and in many places it is little more than the tattered shreds of a shawl. We would be wise to protect and restore it.

This resource is indispensable because it is the re-creative resource, and recreation is essential to life.

The recreational resource is not something that stands apart from the other resources; it is composed of them and is usually the sum total of them all. When it is being properly conserved and utilized, there is strong probability that all the component resources are likewise being

properly treated. When the component resources have been squandered, the recreational resource has likewise vanished. Recreational utility is rightly becoming the criterion of good land management, and parks are strongly indicated as the apex of a national conservation program.

Parks are not a type of scenery; they are a type of public reservation. That type of reservation could be applied to an acre of grassland in the plains as well as to an acre of mountain summit in the Andes or the Rockies. Park standards, therefore, refer not to the kind of natural scenery that may be selected for park status, but to the use that is made of it. Here in the United States there has been hair-splitting difference of opinion for many years over the question of park status for this mountain peak or that one, because some other one, already established as a national park, is a little higher or may be superficially resembled by the peak that is being recommended for park status. Impractical as such dialectic is, famous scenic areas have been opposed for national park status for years on that basis. If there were two Yellowstones, would we refuse to use one of them?

Park reservation is equally applicable to the lofty mountains, the great plains, the southern coastal forests, the deserts or the seashore. No matter what type of physiography may be chosen, or what biologic, geologic, historic or archeologic exhibit, the purposes are the same: the areas are set apart to be preserved and enjoyed without impairment. While the 158 reservations in the national park system of this country are grouped into eleven descriptive categories—such as parks, monuments, historical parks, historic sites, battlefield parks, and memorials, they are all the same type of reservation: generically they are all parks.

When someone attempts to break through one of these reservations and exploit its resources for private gain, that is a threat to park standards and should be a matter of public concern. Such attempts are usually piecemeal and each is made by its proponents to appear reasonably insignificant. But the parkman knows from hard experience that all such invasions are cumulative and that the toxin, if permitted, will in time become lethal.

In the national parks we are trying to preserve the land whole. Not that human use of the areas should be subordinated to nature protection, and not that in the parks we think more of wildlife or other objects than of people. Parks are for people to use and there is no other reason for their existence. But, if a car is to transport us, we must keep its mechanism in running order. If parks are to serve us we must protect their natural machinery. There is a keen analysis of the point in Grinnell's and Storer's "Animal Life in the Yosemite" in which they describe how a segment of nature works, and they point out that:

> The White-headed Woodpecker is a species which does practically all of its foraging on trees which are living, gleaning from them a variety of bark-inhabiting insects. But the White-headed Woodpecker lacks an effective equipment for digging into *hard* wood.

It must have dead and *decaying* tree trunks in which to excavate its nesting holes. If, by any means, the standing *dead* trees in the forests were all removed at one time, the White-headed Woodpecker could not continue to exist past the present generation, because no broods could be reared according to the inherent habits and structural limitations of the species. Within a woodpecker generation, the forests would be deprived of the beneficent presence of this bird. The same, we believe, is true of certain nuthatches and of the chickadees—industrious gleaners of insect life from living trees. They must have dead tree trunks in which to establish nesting and roosting places, safe for and accessible to birds of their limited powers of construction and defense . . . Dead trees are in many respects as useful in the plan of nature as living ones, and should be just as rigorously conserved.

The type of facts that Grinnell and Storer point out is no hindrance to park management and use. Recognizing these facts in our plans and developments, we can increase the utility of our parks, and if our feet are on the ground, we can develop almost any kind of park. To do so, however, our purposes must also be clearly in mind. These statements seem obvious, but in fact they are not. There is frequent conflict between park men, one faction charging that the other would virtually lock up the parks and keep people out of them, and the other charging that the first would virtually make city playgrounds of all parks. Would not both factions be nearer the truth if they agreed that there is no conflict—that we should, so to speak, render to Caesar the things that are Caesar's and to God the things that are God's? That we should not try to treat Jones Beach as we would the back country of Yellowstone or make Yellowstone serve as Jones Beach? Countless thousands of people may play on the beach and the tide comes and washes their tracks away. Countless thousands of people trampling the roots and packing the soil around a giant Sequoia tree will kill the tree that they come to see. Both the wilderness park and the heavily used beach have their places, and there is no legitimate conflict between them. The management of any park must partake of common sense and good taste so that the development of it will not defeat the purpose for which it was established and that purpose will not be confused with the purpose of some other park.

Park management is more, of course, than common sense and good taste. It is a profession and a career in actuality, and the time is ripe for its techniques to be professionalized academically. The breadth of its activities, its intense absorption with people and nature, its concern with the physical evidences of history and prehistory, their preservation and interpretation, the host of practical skills required in construction, operation and maintenance, and the ever-guiding objective of preserving the best and making it available to people—all these make the park profession one of the most attractive and stimulating of all careers.

How many parks can we afford? How many acres are required? When will the saturation point be reached?

The answer to these questions is expected to be given in quantitative terms. But recreation cannot be measured quantitatively because it is a quality of living. Who can say when our living is good enough? Yet I

have seen statements that the present acreage of parks is all that the country will ever need. The only honest answer to these questions is, I believe, that the struggle to improve our living is a never ending one, and that so long as any cultural and recreative factor in our historical and natural resources is being needlessly destroyed it is a challenge. Park status in such cases may be a more useful and productive status than any other, and present indications are that we can afford to live more generously than we have realized.

G. A. Pearson in the March issue of the *Journal of Forestry* says:

> Foresters no longer believe that every acre of land that can be made to grow timber must be used for that purpose. One hundred million acres of productive and well-located timberlands could be made to produce annual yields far exceeding present consumption in this country. Additional areas to the extent of perhaps 300 million acres might well be kept in some sort of forest in the interest of recreation and watershed protection, and to provide a reserve acreage for timber production.

If lands are no longer good for one use, it seems only common sense that we put them to another use. If lands are no longer needed for growing timber, for instance, or for some other industrial purpose, and they are of outstanding scenic and recreational character, would it not be simple wisdom to reserve them for recreational use? The answer would more often be in the affirmative if it were not that there is a widespread tendency to try to do too many things for too many people on every acre of public land.

This policy is referred to as a multiple use. Under it we are told that the resources of a proposed park are so intertwined and are of such great importance that the only way the area can be properly managed is to use all the resources simultaneously and equally, and, that if this is done, the recreational resource will receive full consideration along with the rest.

It is a Utopian theory. In the first place, it does not recognize the nature of the recreational resource which, as has already been said, consists of the other resources in combination. As much as you take from each of the component resources, by so much do you take from it. As numerous writers have pointed out, this system of management, failing to recognize the dominant resource of a given area, detracts from its value by giving equal place to subordinate resources. This is apt to be little more than multiple abuse.

Of what virtue is it to advocate multiple use of a watershed that is worth a thousand dollars an acre for water catchment purposes? By the same token, of what virtue is it to advocate multiple use of an irreplaceable scenic resource that is of public inspirational value? To do so is to try to be all things to all people. It is to reduce land planning to local political pulling and hauling. It is the absence of planning. It would not be worth recognizing except that it is so widely accepted that it has become one of the greatest obstacles to sound land classification.

Multiple use is a common, and very often a good, phase of land management. As it is commonly accepted, however, it means the specific brand of land management that I have described, which sets multiplicity as its objective and permits a mediocre rating of every resource in a given area.

G. A. Pearson, in the same article to which I alluded, says:

> The land management plan envisioned in this article conveys two conceptions of multiple use. In one, management is by units in each of which one use is dominant though not exclusive; in the other, all uses are accorded equal rank on the same area. . . The second plan is applicable, theoretically, where all factors are under complete control; but, because this situation can rarely be attained, the plan is adapted mainly to lands on which all uses are so low that priorities have no practical significance. Forest lands, both public and private, are now being handled, with minor exceptions, according to the second plan. In order to realize the highest values the trend must be more and more toward the first. . .

Von Ciriacy-Wantrup, in the July 1938 issue of the *Journal of Forestry*, said:

> Under the concept of optimum use there may be several uses. The idea, however, is not to have several uses always but to permit them if they are socially desirable. In many cases the optimum use will be a single use rather than some combination of several uses. In other cases it will be one dominant use and as many subordinate uses as do not interfere with the dominant use. In a few cases there may be two or more co-dominant uses of nearly equal importance.

Nobody could have any quarrel with multiple use as a descriptive term, provided it is only an incidental aspect of optimum use. A national park, for instance, which the multiple-use exponents usually refer to as a single-use form of land management, actually may provide several uses. It may provide vital watershed protection; serve as a wildlife sanctuary, as a natural and historic museum and place of public education; it may serve as a source of employment for local labor and a market for local products; increase the value of adjacent and tributary property and, at the same time, serve as a stimulus to national and international travel, which in turn stimulates a host of other industries. All these uses are incidental to the dominant use of the land for recreation. In such case the optimum use of the land includes several uses, but multiplicity is not the objective: it is an incidental, and even an accidental, phase.

I sincerely believe that the exponents of multiple use really have optimum use in mind, and that they have no thought but that the natural resources should be appraised with intelligent selectivity. If that is the case, then we should by all means recognize it and admit that we do not hold multiple use either as a formula of land management or as an objective. Such action would revolutionize public land management. It would lead to the classification of lands according to their best uses. It would mean, for example, as Pearson says, that "Livestock production like timber production would profit immensely, if instead of trying to utilize all lands regardless of quality, the range industry were concentrated on lands really suited to it by climate, soil, and water facilities."

It would mean that a national conservation program, in so far as the public lands are concerned, would be rational and flexible and that recreational lands—to which this paper must confine itself—would be classified as recreational lands rather than as forest or range or some other category for which they are largely useless. It would mean, in time, that lands classified according to their dominant uses would be managed by agencies especially skilled in providing those uses, and that the incidental uses would be permitted in accordance with their relative importance.

In such a conservation program there might be more parks or there might not be, depending upon the classification of the resources. It might be found that recreational areas, so classified for their dominant use but subject to certain subordinate uses, would be a useful complement to the park systems. Such areas would be more apt to retain their distinguishing characteristics, and to render their maximum usefulness, if they were so recognized but parks would remain the apex of the conservation program because they are the irreducible treasures.

Planning the Use of Our Resources in National Parks

FRANK A. KITTREDGE, Regional Director, National Park Service, San Francisco, Calif.

EDITOR'S NOTE.—At the National Conference on Planning, held in San Francisco, July 8–11, Mr. Kittredge discussed Mr. Eliot's paper (see page 13) and concurred in Mr. Eliot's emphasis on the importance of conserving our resources in ways to make America impregnable against propaganda and sabotage. Planning for the right use of national parks is one of the essential elements in national planning.

PLANNING the use of resources in national parks is a different problem from that found on most lands.

We are accustomed to thinking of use of natural resources and land use in terms of dollars' worth of production—how much grain or milk or meat it will yield; how many dollars' worth of lumber can be cut; how much ore can be mined. This is as it should be, within limits of control, for a great proportion of lands.

But it is the purpose of the National Park Service to save and protect superlative scenery, typical areas, typical forests, geology, wild life—the flora and fauna of the country—for the education, recreation and the inspiration of the people.

The planning of the use of our resources in the national parks is not based on the greatest number of dollars which may be taken off the land, but *is* based upon the amount of mental and physical upbuilding it will produce. In our planning, *this fundamental* is always before us: Park resources are for the purpose of recreating and inspiring the individual.

To bring about these results the Service plans for at least four types of land use in national parks:

1. *Developed Areas:* Certain areas are set aside for housing, feeding, and the physical well being of those who visit the parks and those who administer and protect the parks.

2. *Road Areas:* Certain few scenic or typical areas are made accessible by roads so that all who *will* may see and enjoy the natural wonders regardless of age or health or available time.

3. *Trail Areas:* Great areas of primitive wilderness are *kept* wilderness, but are made usable by trails for hikers and trail riders—those who care to see and learn by their own physical exertion.

4. *Undisturbed Areas:* Other great areas are left just as they have come down to us through countless ages—without roads, trails, buildings, or any signs of human visitation.

These are four types of planning for national park lands and resources. To clarify the planning objectives for each of the four types of uses, the following comments are made:

1. *Developed Areas:* In those areas set aside for the housing and accommodation of persons, every effort is made to harmonize the necessary structures with the landscape. Choice of simple and appropriate architecture is a fundamental.

Permanent residences are located away from the beaten path of visitors—hidden as much as practicable. Museums, hotels, lodges, cabins, campgrounds, stores, are so located as to best serve the visitors while at the same time preserving the natural surroundings insofar as possible. The wilderness effect, however, cannot be and is not preserved in this housing area.

Some people drive into housing areas or areas of great concentration and think the park is devastated. Often these people never budge out of the inhabited units. They should realize that they have seen only one type of land use. To judge a national park, its scenery, its preservation, and its use by its service area is obviously impossible—just as impractical as it would be to judge a city's playgrounds by looking at its railroad yard. We do not fight our wilderness battles in the developed areas—each has its place.

A frank recognition of use, and building therefor, without camouflage, must be embodied in all planning. Master plans for all developments were started about ten years ago on a 6-year basis and are brought up-to-date yearly. They are not rigid and are modified as we learn better how to plan and how to use.

2. *Road Areas:* The law founding the National Park Service requires the protection of park resources and also the making of them accessible—two seemingly conflicting requirements. Thus, roads are included in the plans for a small portion of park territory.

For example, only the western fringe of Sequoia National Park is

accessible by road. In Yosemite, only a portion of the western edge, the Yosemite Valley, and Tioga route, are traversed by roads.

Some people judge Yosemite Park by Yosemite Valley. Some complain about the presence of roads, but do not stop to think that a few existing roads bring pleasure and inspiration to untold thousands who cannot hike. They themselves *could* find 80% to 90% of most western parks to be primitive wildernesses today if they would get off the cushions.

3. *Trail Areas:* The elimination of wilderness areas of the country has progressed so rapidly that at the present time there are only comparatively small primitive regions left in the West. The Park Service plans require conserving the greater proportion of their superlative areas with either only trails and primitive appurtenances, or no trails at all.

Trails are planned so they will serve the hiker and the horseback rider, the scientist, and all who will work to see. They will gain the greatest good and the greatest inspiration through seeing the wilderness under their own power and by their own physical labors.

4. *Undisturbed Areas:* For scientific reasons, for the complete protection of wildlife species, for watershed preservation, and for other reasons, a considerable portion of the wildernesses of the western parks is left even without trails, accessible only under the same conditions as found by the pioneers.

This generation of planners can well afford to leave some primitive wilderness untouched for the experience and judgment of succeeding generations.

Summary: This nation was the first to establish national parks. That act typified American recognition that exploitation of her natural resources must be curtailed; that commercial use was not the only practical use; that recreational use, health, and the building of character played an important part in the planning for the use of natural resources.

The Park Service's planning includes the many important protective activities—soil conservation to be sure, fire hazard reduction, wildlife protection, of course. All of these and many more are but contributing factors in the Park Service plan of helping in the stabilization of human beings, helping to keep and develop that same spirit of freedom and aggression which our nation's founders had when they lived close to the soil, close to the natural resources. We must keep some of them.

The Service needs the help of all planners and persons in authority to further the recognition of the fact that it requires many types of uses of our resources to bring about a practical and livable whole—of which *complete protection* of certain areas is vital.

Nobody thinks of chopping up the dining table for fuel or using the family Bible for kindling, but there are many who cry to high heaven when a Government agency tries to prevent the cutting of a few super-

lative forests, tries to keep water flowing over a few falls instead of through pipes.

There is a place for all things and there is a place for complete protection of superlative resources in national parks—present and future—if our national character is to be preserved.

Planning the use of our resources in the national parks requires the interpretation of nature, preservation for recreation and inspiration, permanent use without consumption.

National Park Service Policies

EDITOR'S NOTE.—The following statement of current national park policies was prepared at the request of the Washington State Planning Council. On June 5, 1940, it was transmitted by Director Cammerer to all field officers for general reference. It is presented here as a document of more than passing interest.

Legislation. Policies for the administration, protection and maintenance of all areas of the national park system are established under the provisions of the Act of August 25, 1916, as amended, entitled, "An Act to establish a National Park Service, and for other purposes." The Act provides:

> The Service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The ideals, objectives and policies of the Service are inherent in this law.

National parks are established by acts of Congress. National monuments are established by proclamations of the President.

Private Rights. Areas of the national park system are established subject to all valid existing rights. Thus all valid claims, locations, or entries, whether they are for homestead, mineral, or other purposes, existing at the time of the establishment of an area, are protected and maintained. Rights to tax private properties and businesses within areas of the national park system remain in the States.

It is the policy of the National Park Service to give special consideration to holders of permits and leases on national forest lands when such lands are transferred to national park status.

Mining. Congress has generally maintained the policy that prospecting and mining shall not be carried on in national parks and monuments. This, of course, does not affect valid mining claims and patents issued prior to the establishment of the park. Congress has made certain exceptions to the general policy by enacting legislation permitting mining in Mount McKinley National Park, Glacier Bay and Death Valley National Monuments. In certain portions of Olympic National

Park prospecting and mining may be continued for five years from the creation of the park. With reference to the study of the Cascades region, important mineralized sites should be excluded from consideration, if possible. If the study should result in recommendations for park areas involving important mineralized areas, the National Park Service would be willing to recommend continuation of prospecting and mining.

Water Control. Power and irrigation developments are inconsistent with the national-park type of land use and the Congress has expressly exempted national parks and monuments from the operation of the Federal Water Power Act of June 10, 1920, as amended.

Full protection is afforded watersheds in the national parks and monuments, which protection is of vital importance to all water and power developments and stream utilization below the park boundaries.

Grazing. Grazing and tourists generally do not mix. It is a common fallacy that you can have sheep and cattle grazing in the finest scenic areas and still keep those areas as attractive to tourists. Where grazing has been carried on prior to the establishment of a park, it is the policy of this Service to effect curtailment or elimination gradually, usually over a period of years, to permit the operators to establish themselves elsewhere. Practically all grazing has been eliminated from the national park system.

Accessibility. Minimum developments to facilitate interpretation and enjoyment of the parks are obviously essential. The policy is to maintain in a completely natural or wilderness state all but those small portions necessarily developed to give the public the essential practical means of enjoying the areas.

The Master Plan. The master plan policy provides that all improvements and use shall be brought about in accordance with a preconceived plan, developed with special reference to preservation of the landscape and a comprehensive understanding of future needs. The master plan policy serves to balance the daily administration of the areas, by showing past and present conditions for public use and a reasonable course for the future, particularly in the matter of physical improvements.

A road and trail system, for example, is carefully planned in its entirety. It may take many years to complete, but each unit of construction that is executed is a portion of this complete plan and a step towards its achievement.

The master plan is more than the work of one man; it is a product of the Service as a whole. Each feature of it has been studied and passed upon by the various technical branches of the Service before administrative approval is given. No trails, roads, buildings, campgrounds, or other developments are permitted within a park unless they have been previously approved and included in the plan. The master plan is a conservative device, purposely adopted to avoid hasty or ill-conceived projects.

Roads and Trails. It is the policy of the Service to develop, in areas where any roads and trails are necessary, these routes which contribute to the more complete understanding and enjoyment of the areas.

If a national park were established in the Cascade Mountains which included a highway under the jurisdiction of the State, the administration of that highway would remain unchanged in all respects unless the State, through legislation, voluntarily ceded its jurisdiction. In the southwestern portion of Mount Rainier National Park, for example, State Highway No. 5 is under the control and maintenance of the State Department of Highways.

The National Park Service advocates the use of trails and believes in furnishing minimum essentials in connection with them to make trail trips attractive and pleasant. Trailside shelters, drinking water protection, campgrounds with fire pits, toilet facilities and other minor developments are provided.

Public Facilities. It is the general policy that facilities for the accommodation of the public, such as hotels, should not be provided in the areas of the national park system if it is possible to obtain accommodations nearby which satisfactorily serve the needs of visitors. In the areas where public accommodations are required, the Service follows the policy of providing a scale of service in keeping with the character of the areas and the requirements of the public.

The Service does not itself have authority to operate facilities for the accommodation of the public, but it does have authority to grant leases and make contracts between the Department and private agencies for the construction and operation of such facilities. The rates charged for public services are approved by the Department upon recommendation of the Service. Public playgrounds, museums, winter sports facilities and other general accommodations are developed and maintained entirely by the Federal Government.

Fees and Charges. The policy for fees and charges has been in effect for more than 30 years. It is based on the principle evolved through wide experience in state and national parks and consistently upheld by the Congress that the user should pay a small sum toward the upkeep of the areas when he uses them.

Fees collected from motorists have accounted for more than half of the total national park system revenues. Other important items of revenue are the fees paid by the operators of public service facilities; and charges such as are made for the Federal guide service at Carlsbad Caverns National Park. In many areas of the system circumstances do not warrant fees and charges; in fact, more than two-thirds of the 158 areas of the system are entirely without fees.

Forestry. The practice of forestry within the national park system does not contemplate commercial lumbering operations. The policy is to perpetuate the natural forests. Wood obtained from the parks is to

be used within those parks for construction use and for fuel, and is limited to that available from rights-of-way, building or development site clearings, vista clearings, and from insect and tree disease control and fire hazard reduction operations.

Wildlife. The objective of the National Park Service wildlife policy is fully to protect all forms of wildlife in their natural state, avoiding undesirable artificial aids, such as feeding and control of their natural enemies. Control of predators is exercised only after a thorough investigation by qualified authorities proves the need. Hunting is prohibited. It has been found that the protection afforded wildlife in the large national parks has resulted in increased amounts of game in the adjacent country where hunting is permitted.

Fishing is permitted and encouraged in the parks. Millions of fish are planted annually in park waters.

Optimum Use. National parks are as much a form of land use as are farms. In the settlement of the country some lands are more suitable for farming, others for grazing, others for forestry and mining; but some lands are more suitable for the inspiration and recreation of the people. The classification of public lands according to their most profitable use must inevitably give recognition to the lands of national-park caliber.

National parks not only provide recreation for the millions who use them, but they provide a lasting source of income to adjacent communities and numerous industries. At Mount Rainier, for example, the park operators and the Government spend for such items as salaries, supplies, and improvements, in an average year, about $950,000, the major portion of which is of direct financial benefit to the State. Since this park is about twenty miles square, it is evident that it makes an outstanding financial return from so small an area of wild land. This shows clearly that the natural resources of the park are being used, but are not being used up. People spend money in traveling to and from the parks, and that money directly contributes to the income of the communities and industries. According to the Washington State Progress Commission 800,000 tourists left $83,000,000 of new money in the State of Washington during 1938. By providing additional scenic attractions that will prolong the average stay, the income of new money can be vastly increased. The Progress Commission finds the tourist industry in the front rank of business within the State. The tourist industry actually returns more than the fishing industry valued at fifty millions annually, or the apple industry valued at 35 millions annually.

National park conservation is a national land use policy. The dominant aim is the common good of mankind, rather than special gain of a particular individual or group. The healthful civilizing and benefiting influence of parks is of vital national interest.

An Approach to a National Parkway Plan

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FROM time to time ways and means for the study of a National Parkway plan are discussed.

The approach to the problem is often based on the need to free the great American Public from the necessity of riding along highways lined with the proverbial hot dog stand. This approach says: "Let us provide a National System of Parkways."

A parkway is an elongated park which prohibits commercial traffic, eliminates frontage rights, and restricts access to the roadway passing through it.

Parkways first developed on any scale in areas of heavy traffic where a parallel route is needed to carry the load. Faster routes are demanded by passenger traffic, existing lanes are strengthened to carry the freight. The elevated and the subway, rail predecessors in this problem, did this for the passengers. Frontage was eliminated, access restricted, and freight left to the older routes. The highway builder finds these devices expensive and limited in use. Two-lane auto traffic demands a tunnel or a bridge almost the same width that four tracks require. Automobile traffic cannot change to electric power and thus discard its fumes when a certain density of traffic is reached. These cold economic and physical facts put the elevated and the subway out of reach of the highway builder, except in few cases.

A route with a strip of park land (be it ever so narrow) paralleling the roadway will cut off frontage and allow restricted access just as will an elevated roadway. Sorting out the traffic is as simple on one as the other.

Fortunately for the parkway pathfinder, the realtor before him saw no profit in the stream valley and turned his back to it. John Q. Public followed the realtor and frequently made the stream valley and river bank the site for the neighborhood dump.

At any rate the parkway need was for a through route and cheap right-of-way. The forgotten stream valleys lay waiting. Land values were low and enough right-of-way was needed for both road and stream and the way was made clear for the fourth element of the parkway—Beauty. The beautiful, the last element to be considered in the evolution of the parkway, turned out to be its best selling point and it has been emphasized to such a degree that many people believe it to be the principal, distinguishing factor between a parkway and a highway. Beauty came to our roadside from our forgotten stream valleys and reclaimed dumps. She slipped in when that all-powerful Bogey Man to Public work, "Land Prices," had his back turned. Land Prices is a truly vicious character. He frequently has John Q. Public, his administrators, and his judges buffaloed to where they will spend thousands on construction to save tens for land.

This evolution of the parkway as a functional part of the traffic system of a community is presented to show that it is related to the highway system.

To expand this same reasoning to a national scale, we must relate it to the national highway system. Let us begin with the condition of that highway system and its economics.

Strange as it may seem to Mr. J. Q. P., who pays gas tax to travel endless detours, our system of highways is not nearly completed. Such as it is, it is more nearly paid for than the railway system. It has much more mileage and many less bonds.

John Q. who pays the bills, bought his first car, goggles and a duster about 30 years ago. He used our country roads to reach the next town. He enjoyed it so much he soon bought so many cars the Highway Commission soon found it was cheaper to pave a strip of road than to replace the mud John Q. took away on his car and the dust he stirred up.

John Q. learned to drive faster and bought a new and faster car. He needed a two-way pavement and it became cheaper to eliminate the right-angle turn than to fix the farmer's fence and pay for his damaged crop.

And so today John Q. Public is still learning to drive better, and quite differently, than he did five or even three years ago. The road he called a boulevard and traveled at full throttle ten years ago, he takes slower today. John and his car have changed.

The road system of the country is trying to keep up and trying to find the pace and habits of its users. Nevertheless, it is obsolete and will be for some years.

Why should we attempt to superimpose a parkway plan over the National Highway plan when we know that John Q. will want to improve his highway system first. In many places he will want a freeway in preference to a parkway. He is also demanding and getting some attention to Roadside Beauty—fitting the highway to the landscape.

He will, as fast as he can afford it, ask for Freeways and Parkways as the traffic demands.

The highway system of this country today does not demand a parkway system. To impose a parkway system on it will only delay the day when the highway system is perfected and the supplemental freeways and parkways are proven needs and as it reaches that perfection it would make obsolete any complete parkway system that might be provided now.

Let us leave the parkway system that is demanded for traffic to be developed by those who are building the road system—and for National Parkways consider another type of parkway, that which belongs in a park system.

It is another type of parkway—one that is entirely for recreation, one that is built to display certain natural landscapes or historical country. The Blue Ridge Parkway, the Natchez Trace, the proposed

George Washington Parkway on each side of the Potomac to Great Falls, the Mount Vernon, now (due to the airport) from Alexandria to Mount Vernon, are examples.

These are:

(a) Not being built to relieve existing travel routes but for a traffic to be developed because of their appeal.

(b) Conceived and designed as a completed finished product and not developed by connecting and improving existing traffic lanes as the everyday traffic route came into being. National Parkways may be considered as park projects rather than road projects and it is not essential that they be connected. The traffic system can do that.

Is it essential to connect the Blue Ridge and Natchez Trace Parkways?

Does the Mississippi Parkway have to be built the entire distance from the mouth to the source? Why not build the best sections and omit the least worthy?

Should the Natchez Trace be extended to Laredo, Texas? Or should a Gulf Coastal Parkway be considered for a logical distance?

On the other hand, if the Blue Ridge were extended to Harpers Ferry and north, there would be no good reason for not extending the George Washington Parkway to Harpers Ferry to connect.

Land prices and demands for other uses of land may make a parkway with adequate right-of-way serve the purpose such as the shoreline of the Potomac, the Blue Ridge.

On the other hand, a study of the Green Mountain Parkway developed into a more logical solution—a National Park Project.

In the West, where land values are low and parks are made from public land, the parkway is not so apt to happen because it results in a full fledged National Park Area.

In conclusion, let us consider the term, National Parkway System, as a supplement to the National Park System. Let it provide protection and emphasis to nationally important scenery, where economy of land is essential.

Perspective in National Park Affairs

CARL P. RUSSELL, Supervisor of Research and Information, National Park Service, Washington, D. C.

TO MOST of the pioneer workers who directed their energies to the creation of national parks, and to the great majority of national park visitors who entered the first parks, the unusual scenic qualities of the reservations were sufficient unto themselves. Few people thought of the areas as being expressive of the American message, and very few indeed demanded scientific explanation of the natural features that had been preserved.

Gradually a changed attitude of the public mind came about, and visitor interest was no longer satisfied by the knowledge that the Upper Yosemite Fall is the highest free leaping waterfall in the world, or that Mount Rainier's glaciers constitute the largest accessible single peak glacier system in the United States proper. Insistent questions were raised concerning the meaning of park phenomena, and the National Park Service busied itself in establishing facts and devising means of making information available.

Thus it became apparent that an important educational aspect was to be found in the public enjoyment of the national parks; that scenic and scientific appreciation, historical mindedness and national patriotism might be intensified through their use. A definite educational program was established within the formal set-up of the Service. Concurrently with the growth of the program of research and interpretation, there was developing both within the National Park Service and among national parks enthusiasts outside of the Service, a new concept of the scope of national park opportunities.

Twenty years ago the American Civic Association in its Park Primer defined a national park as "an area, usually of some magnitude, distinguished by scenic, scientific, historic or archeological attractions and natural wonders and beauties which are distinctly *national* in importance and interest, selected as eminent examples of scenic, scientific, or historic America, and preserved with characteristic natural scenery, wildlife and historic or archeological heritage, in an unimpaired state, as a part of a national park system for the use and enjoyment of this and future generations."

In 1929 the Camp Fire Club published "standards" which were endorsed by various associations. These national park standards stressed the idea that scientific, educational, and inspirational values should dictate the major uses of the areas.

In 1930 a significant acquisition was made when Colonial National Historical Park and George Washington Birthplace National Monument were established. This was the occasion for the planning of a serious program of historic conservation. In 1931 a staff of historians was employed, and the Service entered into the specialized work of administering historic areas. The War Department transferred fifty-nine historic areas to the National Park Service in 1933, and passage of the Historic Sites Act of 1935 made the Service responsible for a nation-wide movement to conserve all important historic and archeologic sites.

In 1937 ideas on the future national park system had crystallized further, and the Service gave definition to its policy on acquisition of new areas. In the *Congressional Record*—Appendix of January 24, 1938, pp. 1375–76—Congressman J. W. Robinson of Utah published this policy as contained in an address by Director Cammerer. Here the Service declares its intention to secure for public use those areas that

are of more value nationally for recreation and inspiration than for any other use, to acquire nationally important prehistoric and historic sites, outstanding stretches of the ocean beaches, the most instructive geological phenomena, the finest representative examples of native plant and animal associations, and a system of nationally important scenic and historic parkways. In other words, the Service committed itself to a policy of preserving, and presenting by striking examples, the comprehensive and varied story of earth forces and the progress of civilization in this country.

From the standpoint of scope, the national park stories by areas now connect and constitute expression of much that is essentially American. Because the program is not limited to "primeval" areas, it does represent an expansion of the national park idea of 1870.

National monuments characterized by values other than scenic grandeur first came into the picture in 1906, when An Act for the Preservation of American Antiquities authorized the President of the United States to declare by public proclamation significant areas situated upon lands owned by the government to be national reservations. Caves, canyons, natural bridges, fossil deposits, volcanic manifestations, samples of desert flora, a forest of redwoods, battlefields and other historic sites, and variety of archeological treasures were among the first units that had been collected under the Antiquities Act when the National Park Service was established in 1916.

This collection continues to grow during the early years of organized effort of the National Park Service under Stephen T. Mather. Gradually it became apparent to all workers in the field of national parks activity that a wealth of recreational and inspirational values existed in many sections of the country and that the process of acquiring them should be selective rather than collective.

Most conservationists now agree that it should be the purpose of the nation to select and preserve, while it is still possible to get them, those areas of national significance which give expression to all things American. Great archeological relics are not less distinctly national in importance and interest than are the granite cliffs of Yosemite or the abysmal depths of the Grand Canyon of the Colorado.

A review of the debates on the policy affecting the scope of the National Park Service program indicates that most of the differences of opinion grew out of differences in views as to what constitutes a national parks objective. As a result of much mulling over of ideas and definite public action in the matter, the government now embraces the opportunity to preserve and interpret the broad American story in all of its varied aspects. The expanded program may well be accepted as the ideal of Stephen Mather, who visualized a broad park concept "to provide a new form of land use, humanly satisfying, economically justifiable, and with far-reaching social implications."

Among the social implications there looms that undertaking in unique educational methods which for twenty years has contributed to the public enjoyment and understanding of the distinctive features of National Park Service areas. In 1920 interpretative work was started in Yosemite, Yellowstone, and Mesa Verde. Guided trips, lectures, and a special exhibits service found immediate response from park visitors, and the work spread in a year or two to include Glacier National Park, Grand Canyon, Mount Rainier, Rocky Mountain, Zion and Sequoia National Parks. By 1923 a central office was established in Berkeley, California, from which to direct the new program, and in 1924 a fairly general interest of educators throughout the country was focused upon the new techniques which were demonstrating their effectiveness in promoting the cause of conservation.

The American Association of Museums recognized the possibilities of applying museum methods in interpreting the vast story told by the natural and historic exhibits in the park areas. In 1924 the Association organized to investigate ways and means of establishing an adequate museum program within the National Park Service. With funds provided by the Laura Spelman Rockefeller Memorial, some of the first adequate and permanent museums in national parks were built in 1925–33 under the guidance of the American Association of Museums.

This initial work in museum planning and construction laid the foundation for the existing museum program which with the support of government funds now includes central museums, focal point museums, historic house museums, restorations, trailside exhibits, and exhibits in place in most of the 155 areas of the Federal park system. Because central museums in the national parks provide offices, laboratories, and libraries for the educational personnel, and contact stations for park visitors, the museum program has become the center of the interpretative work in the parks.

In order that the growing program of research and interpretation might be well balanced in its development, the Secretary of the Interior in 1928 appointed a committee of nationally known educators to study its possibilities and define its policy. Acting upon the recommendations of this committee, the National Park Service on July 1, 1930, established a Branch of Research and Education, now called the Branch of Research and Information, to coördinate the various phases of research and interpretative work. In reviewing objectives and policy of the Branch we find this significant recommendation made in 1929 by the Committee on Educational Problems:

> Any plan involving assistance to the visitor must include an examination of the attitude of the park visitor to what is presented. We are not concerned merely with the fact that many things may be large or wide or deep or highly colored or have an interesting evolutionary development. From the point of view of the visitor, we are interested in their meaning to him in terms of his most fundamental thinking, and their significance in relation to his everyday life.

Following this thought, the National Park Service in all of its public contact work attempted to use its opportunities to give emphasis to the human value of the natural exhibits of the parks, an emphasis that strives to advance understanding and appreciation of the natural phenomena and human history of the Service areas. Nearly five million citizens availed themselves of the lectures, guided trips, and museum services of the national parks during the twelve months just passed. It becomes more evident each year that in this Service is one of the very potent forces now working in the cause of conservation.

From the inception of the idea of an interpretative program, it was obvious to all workers that naturalists and historians engaged in planning and conducting the work must be provided with organized information relating to the features that they were to interpret. A research program was organized. Coöperation on special problems was obtained from the National Museum, the Biological Survey, the Geological Survey, the Bureau of Fisheries, and from universities and museums.

In addition to investigations conducted by outside agencies, the Service established small staffs of research specialists in forestry, wildlife, geology, history, archeology, and the general field of museum work. The attitude of the Service toward its research program is reflected in the recommendation made by national park superintendents in conference at Santa Fe, New Mexico, October, 1939:

> The interpretation of natural and human history in national park areas is recognized as a primary objective. The basis of such interpretation should be organized research. A sense of balance must exist in arranging research and interpretative functions, and the rôle of research, generally, in the National Park Service program should be re-examined. National Park Service problems are national in scope relating to physical, biological, and human values inherent in some of the most perishable of Federal possessions. They pertain to mental health, constructive living, social traditions, enjoyment of life, and other basic matters bearing on the health, education, recreation and psychology of America's population. The National Park Service is most advantageously situated to develop a national perspective in ethnology, history, wildlife, and æsthetic appreciation of scenery.

Six geologists, eight wildlife technicians (Biological Survey), and about two hundred museum workers are now employed. Thirty-four park naturalists and assistants are located in national parks and national monuments. During the season of heavy tourist travel the naturalist staff is enlarged by the employment of temporary ranger naturalists, about one hundred of whom are appointed each summer. These men appearing on lecture platforms, behind information desks, or leading groups organized to hike into the forests or to the high country above timber line interpret the stories told by the natural exhibits of the out-of-doors.

A great problem is to find those scientists who have the abilitiy to present science in simple graphic manner. The ranger naturalist is selected on the basis of his scholarship, but in his work with park visitors he must distinguish between the public mind and the scientific mind.

His presentation of a story must be made with clarity and force, but the technical expressions of the scholar, scientist or historian are reserved for display before professionals and are not inserted into the popular interpretations offered park visitors.

Within the 155 areas now reserved by the National Park Service, or in those proposed for acquisition, the pageant of American history unreels like a lasting cinema. Archeology and ethnology find some representation, especially in the areas of the southwest, where the exhibits run the gamut from the dwellings of a people who lived a thousand years ago to the camps and pueblos of the modern Indian. In the field of geology, the national parks and monuments constitute a natural textbook. The pages of that book are widely separated and scattered, but the automobile and good roads overcome the difficulties of distance. Many colleges and universities take geology classes to these out-door laboratories. The existing Federal areas do not constitute as fine and complete a series of geological exhibits as might be desired. The story of earth forces in the United States must still be defined and a survey completed to locate more of the significant areas. Then selection should be made to complete a coherent system of parks and monuments which will exemplify the major themes of American geology. Just as sound conclusions can be drawn as to the relative values of geological areas after a comprehensive survey has been made, so should a broad review of the ecology of the country precede the selection of biological areas. The park system is especially well prepared to preserve wildlife and generous portions of wildlife habitat. Unless action is taken now the country will lose forever many native features of flora and fauna which characterized the America of the pioneer settlers. Studies are being made to determine what can still be restored and steps taken to preserve samples of nature's manifestations. Each type is given consideration; the great grasslands of the central plains constitute a special challenge; the desert in its varied forms is coming within the bounds of reservations; the cypress swamps of the south are being investigated for inclusion; the Arctic tundras are scrutinized and distinctive forest types, such as the Port Orford Cedar, are searched with the idea of establishing boundaries for protective purposes.

A division of land planning within the Service gives undivided attention to the coördination of investigative work and the selection of new areas.

Acting while there is still opportunity to acquire the areas for public use, the Service hopes to preserve within a reasonable time many of the natural and historic exhibits with which to tell the story of America. The interpretation of these varied phases of the American scene constitutes a program of enormous proportions. Here is a problem in education that has no exact parallel in the world.

Land Use Planning on the National Forests

A PAPER READ AT THE NATIONAL CONFERENCE ON PLANNING, SAN FRANCISCO, JULY 8–11, 1940

S. B. SHOW, Regional Forester, U. S. Forest Service, San Francisco, Calif.

THERE are approximately 214,600,000 acres within the exterior boundaries of the National Forests in the United States with 174,000,000 acres in federal ownership. In addition there are 14,200,000 acres within purchase units, experimental areas and land utilization projects with 2,500,000 acres under Forest Service administration. Ten regions have been established to administer these large holdings with San Francisco as the headquarters for the 18 National Forests and 2 purchase units in California and the 4 western counties of Nevada. This presentation will be restricted to the 25,214,357 acres within the National Forests and the purchase units of the California Region with 19,640,402 acres in federal ownership, as such restrictions will show an adequate cross-section of the Forest Service program.

The Resources. The National Forests surround on three sides the two large fertile valleys of central California—the Sacramento and the San Joaquin Valleys, and form a northern and eastern rim for the heavy concentration of population in the citrus belt of southern California. Points of the timbered forests which are concentrated around the Sacramento and San Joaquin Valleys extend to the valley floor, but in general the boundaries are not found below the limits of the commercial timber belt and include mostly the higher mountain lands. On the eastern slopes of the Sierra Nevada Mountains, the boundaries extend beyond the Nevada State line or to the floor of the large open valleys. In southern California the woodland and brush covered hills immediately adjacent to the centers of population have been included so as to assure adequate protection of their valuable water supply. Two redwood purchase units have been established in the redwood belt, one at the northern limits along the coast near the State line and the other near the southern limit, a short distance north of San Francisco, California. Federal purchases to date have been confined to a small acreage in the northern unit.

Many varied and valuable resources readily accessible for wise use are found in the National Forests. In the pine forests there are approximately 53 billion board feet of merchantable timber in federal ownership that can be cut advantageously with the 50 billion board feet in private ownership within and adjacent to the boundaries on a permanent basis, with an annual cut of about 1½ billion board feet. There are approximately 600 million board feet of redwoods mixed with 100 million board feet of other species now in federal ownership.

Range values are found on more than 10,000,000 acres of federally owned land, on which there are grazed annually 612,000 stock months of cattle and horses and 1,054,000 stock months of sheep and goats.

An inventory of the recreational resources reveal that there are 2,150,000 acres of land in scattered tracts within or immediately adjacent to the National Forests (exclusive of any State or National Parks) that are suitable for some form of recreational development of which more than 1,340,000 acres are in federal ownership inside the forest boundaries.

The wildlife resource is rather difficult to measure and for that reason is often ignored. Estimates by the Bureau of Biological Survey for California show 528,000 deer, 1,000 elk, 14,200 antelope, 2,000 mountain sheep, 200 wild boar, and 14,600 bear. No estimates for Nevada are given here, as only a very small percentage of the game roam on the National Forests of this Region in Nevada. In 1939 an estimate was made of the summer game population in the National Forests which totaled 373,000 deer, 400 mountain sheep, 350 elk, 2,200 antelope, 11,000 bear, and 100 wild boar and many thousands of fur-bearing animals. Game birds to be found are quail, grouse, sage hen, ducks, geese, doves, pigeons, and pheasants.

All the mountainous lands irrespective of vegetative cover have watershed values. Nearly one hundred reservoirs are existing or proposed primarily to store water for irrigation or domestic use. The watersheds for the Central Valley Water Plan include almost every acre of land on the west slopes of the Sierra Nevada within the National Forest boundaries. The most critical area in need of water is undoubtedly southern California. Every precaution is taken to reduce the fire hazard which might destroy the brush and woodland cover which retards the stream run-off and safeguards the dams and reservoirs from silting. The water supply for use in the fertile valleys in western Nevada comes from the east slopes of the Sierra Nevada Mountains. Proper protection and management of the watershed lands back of existing reservoirs can assure the users of an adequate supply for their use.

Vast deposits of metallic mineral exist in the National Forests, which include gold, silver, copper, tungsten and chrome.

The power resource of California is estimated to be 4,480,000 K. W. in average output capacity, with 87 percent wholly or in part in the National Forests. So far only 24 percent of the total potential output has been developed or is under construction, and 89.5 percent of the undeveloped capacity is wholly or in part within the National Forests.

The Planning Process. The National Forests were created to serve the people with the benefits not to be limited to the local communities but to extend to the State and the Nation. Short-sightedness and wasteful utilization of the natural resources in many parts of the country, although not yet prevalent in California, has brought about ghost towns

and poverty. Wise use of the resources for the betterment of human welfare is the basis for Forest Service administration and management. Forest lands properly managed can furnish vast reservoirs of work, permanent supplies of power and raw material to industries, and unlimited opportunities for rest and relaxation.

The initial step in the development of a land-use plan is to select boundaries for a *natural* unit and then to obtain an inventory of each resource irrespective of ownership. For timber this requires the determination of the merchantable volume of each species, extent of any by-products, such as Christmas trees, a general plan of utilization which would take into account the accessibility of the timber stand, and the amount that can be cut each year for an indefinite period of time. In range, such data as the location and extent of forage values are gathered. Recreation includes the classification of the land as to the desirability for different forms of use—camping, picnicking, summer homes, winter sports, scenic attractions, which is determined by such factors as type of present ground cover, availability of water accessibility, and topography. The Forest Service has pioneered in the development of inventory methods and techniques.

Next, determination of allowable degree of utilization of each resource is required. The percentage of the total timber stand that can safely be cut, the percentage of forage to be utilized, and safe reasons for its use, etc., have been studied for many years and answers worked out.

The next step is the analysis of the demands for the various resources. The 7,000,000 people of California have concentrated primarily in the San Francisco Bay Region and the Los Angeles area and to a lesser degree in the agricultural centers of the Sacramento and San Joaquin Valleys. Numerous small communities have sprung up in the mountainous country from the utilization of local timber, range, mineral, or recreation resources.

Water receives the greatest local and State-wide demand of any resource. So critical is the need for the retardation of run-off for more year-round use that it will materially govern the future development of the State. California is fifth in the United States in its per capita consumption of lumber, with about 60 percent of the supply being furnished by other States, particularly from Oregon and Washington. In 1937, 185 mills were in operation in the pine region of the State and cut slightly less than 1.2 billion board feet. A large part of this lumber production was from the stands in National Forests. In 1939, 433,000 head of stock were permitted to graze on the National Forests for 1,666,000 stock months of use. Last year more than 4,160,000 people visited the National Forests to use the recreational facilities, with more than 50 percent in camping and picnicking use. In addition, there were more than 4,500,000 visitors to enjoy the scenic values. Each year more and more of the people from the population centers and hot inland valleys of the State

are taking to the cool, timber-covered mountains for rest and relaxation, so that future planning is necessary to adequately take care of this mass recreational use. Some 250,000 hunting licenses and 400,000 fishing licenses are issued annually in California, providing the State with a revenue of $1,500,000. General estimates indicate that on the average these hunters and fishermen visit the National Forests twice a year. Eight percent of the State production of metallic minerals come from the National Forests with a negligible amount of petroleum or other non-metallic minerals. Last year approximately $4,250,000 of gold was mined.

A study is next made of the industries dependent upon the utilization of the various resources and the value of that use to the stabilization of their communities. Those 185 sawmills which were in operation in 1937 furnished 1,500,000 man days of work. Those 1,745 owners who were permitted last year to graze stock on the National Forests needed that feed as a part of their year-long operation. Those cabins and resorts which have been built for the summer and winter recreational use are all privately owned, and contribute to the support of local government. Such factors as these cannot be ignored in the preparation of plans. At the same time, consideration is given to the benefits from the coördinated use of the resources owned by the Federal Government with those in private holdings, and the possible need for federal purchase to maintain and stabilize industries and communities. Private ownership oftentimes is forced to liquidate and cannot manage its resources from a social point of view.

Several principles of land management are developed in the final plan:

1. *Permanent rate of use:* Estimates are made as to how many thousand board feet can be cut from those areas capable of producing timber; what kind, how many and for how long can stock graze on the range; the extent of the recreational use best adapted for potential recreational areas. None of the uses should materially destroy any of the watershed values.

2. *Conservation of resources:* Wise use is conservative use. On the west slopes of the Sierra Nevada Mountains, detailed studies have clearly shown that only a part of the stand, principally the mature and overmature trees, can be economically cut at one time for lumber products, thereby leaving an understory of thrifty young trees for a future cut. The interest of a successful livestock operator is not how many stock he can graze on a certain area, but rather how much weight his stock can gain.

3. *Utilization of resources in relation to community life:* Every effort is made to provide raw materials to dependent industries which would stabilize existing communities. Many of the livestock operators, and especially the small owners with only a few head of stock who are living near the National Forests, definitely need public range during part of the year to continue in business. Vast areas are considered the public's playground—a cool retreat from the hot valley climate or a place to try your skill at winter sports. Wild game roam the forests in sufficient quantities to attract the hunter, while sport fishing lures thousands each year. Rest and relaxation cannot be obtained in heavily concentrated areas, but rather in smaller units scattered throughout a large area.

Multiple Use. Forest lands are often adapted to many uses. The protection of watershed values does not require the elimination of other uses but rather, wise and conservative use. Selective logging need not

destroy recreational values or prohibit this form of use. Care in cutting overmature and decadent trees along the forested highways protects the public's safety, and permits strong young growth to beautify the landscape. Along the entire west slope of the Sierra Nevada Mountains, it is not uncommon to have watershed, timber, grazing, recreation, and wildlife values in the same areas. In southern California, watershed, recreation, and wildlife values as a combination is often found. The extent to which these multiple uses are developed is governed by the existing and potential demands on the resources. Many small communities have sprung up in the interspersed mountain valleys, with their livelihood dependent upon the multiple use of the forested lands.

Conflicts. Conflicts are unavoidable in the planning of multiple-use management. Some problems are immediately apparent and can be easily remedied with minor adjustments. Here is an area where the land is suited to both timber production and recreation, with an existing demand at the present time for both uses. The recreational values can be utilized by selecting fewer trees to be cut, perhaps not more than a third of the total number, and returning again in 20 or 25 years to cut another portion of the stand. In these cases where logging is permitted, special care is taken in the selection of trees and method of logging along streams and roadside strips to avoid unnecessary damage. Similarly, an apparent conflict between timber and range use is readily adjusted.

Real conflicts which affect the economic framework of the entire management plan are not so easy to solve, as they usually require major adjustments and in some cases the subordination of one or more of the uses. In Modoc County, livestock is the primary source of livelihood. Most of the operators need National Forest range to assure them of necessary feed. Within the past few years the deer population in this county has increased so rapidly that the economy of the local livestock industry is threatened. Some measures must be immediately taken to control the number of deer at a level that the forage can normally support, and still assure the maintenance of the livestock industry at its existing economic level.

Trial and error over many years have proven that livestock production is the economic enterprise of the agricultural valleys of western Nevada. The east slopes of the Sierra Nevada Mountains adjoining these valleys furnish excellent feed for livestock for several months each year. Some of these mountain lands also have high recreational values, especially the glaciated basins containing lakes, streams and tree-bordered meadows. The people from Los Angeles can reach these areas within a few hours' drive from home. On these limited areas, it will be necessary to ultimately subordinate other uses because of the intense recreational demand. Grazing as a dominant use, however, can continue indefinitely on the major portion of the east slopes. Planning for range resource development to offset the capacity lost through recreational use

will be necessary to maintain the economic stability of adjacent communities.

Final Overall Plans. In the process of preparing the overall plans, each conflict must be recognized and harmonized or adjusted as much as can be economically and socially possible. The place and relationship of each resource must be clearly defined to make any plans workable. In 1937 a land-use study of the lands within the watershed of the Shasta Reservoir outside the Shasta National Forest was requested by the Conservation Section of the Sacramento Valley Council of the California State Chamber of Commerce. As a result of this request the Forest Service initiated such a study and prepared a detailed report. A copy of the report known as the "Land Use Study of the Kennett Area" serves as a typical example of a multiple land-use plan.

Protection and Transportation. Continued benefits cannot be obtained from such a management program without adequate protection and transportation facilities. Fire is the most common destructive force that must be controlled—although equally serious damage is done in some parts of the State by the pine beetle and the white pine blister rust. Over the past 20 years the Forest Service has conducted many intensive studies in different phases of fire detection and suppression work. Vegetative ground-cover has been classified as to the degree of inflammability and rate of spread. A fire detection system has been developed with strategic points selected for lookout stations, location of fire crews has been systematized, special precautions have been inaugurated on high hazard areas, etc. The objective in the Forest Service fire protection program is to keep the annual burn below one-tenth of one percent of the total area under their administration. Adequate protection against the pine beetle and white pine blister rust requires the assistance and coöperation of the Bureau of Entomology and Plant Quarantine, also within the Department of Agriculture. Preventative measures are now being practiced in the infested areas by the burning of beetle-infested trees and the elimination of the gooseberry bush, which is the alternate host in the spreading of the white pine blister rust. Research is now being carried on to determine the feasibility of utilizing those trees which are most susceptible to beetle attack.

The overall land-use plan and the needs for protection furnish a sound basis for a permanent transportation system. From the determination of the kind and amount of use (recreation, timber, forage, and fish and game utilization, mineral development, and fire protection) the engineer can set up necessary standards that must be used to handle the anticipated travel. Many of the road scars that are commonly found in the mountains today might never have been made if a logical overall plan had been made prior to their construction.

The Central Housing Committee

EDITOR'S NOTE.—We asked the Central Housing Committee, which has for five years acted as a clearing house of information for the various Federal housing agencies, to send us an article concerning its accomplishments. Horace W. Peaslee, Executive Secretary, sent in the following cryptic announcement, a sort of *multum in parvo*.

ORGANIZATION OF THE CENTRAL HOUSING COMMITTEE

(Authorized by the President 1935)

An informal coördinating body useful in bringing about intelligent research, and exchange of ideas, and a better understanding of problems involved: representing various Federal agencies concerned with housing, construction, and finance.

CHC CHAIRMEN

(Appointed by President) { 1939– Lowell Mellett; 1938–9 C. J. Peoples; 1935–8 F. A. Delano }

THE CENTRAL HOUSING COMMITTEE

Executive Secretary

Ways & Means (Committee of Alternates)

Assistants Clerical (assigned)

Committees and Sub-Committees (Inter-agency) memberships)

Committee Secretaries and staffs as required (assigned)

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RFCMCo	Geo. B. Williams	J. L. Dougherty
USHA	Nathan Straus	W. J. Vinton

. . . with principal technical assistants functioning through auxiliary groups . . . which discuss problems of mutual interest, exchange experience and data, and make generally available the results of joint studies . . .

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Publications

Joint Bibliographies
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1601 Eye Street, Washington, D. C.

Publications of the Central Housing Committee, 1601 Eye Street, Washington, D. C.

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Defense Housing

C. F. PALMER, Housing Coördinator of the National Defense Advisory Commission, Washington, D. C.

EDITOR'S NOTE.—On October 5, 1940, C. F. Palmer, Housing Coördinator of the National Defense Advisory Commission, made his first public announcement of progress before the Central Housing Committee. We are privileged to present his statement here.

SEVENTY-SIX days ago the Coördination of Defense Housing began. Through your Central Housing Committee, of which Lowell Mellett is the capable and genial Chairman, you, the Federal executives who deal with housing, unanimously decided such coördination necessary for total defense against the threat of war.

The office of the Coördinator was made part of the National Defense Commission and the task of that Commission is to see that the Army and Navy get what they need, when they need it, with no ifs, ands, or buts.

We must see that not a single rivet in a destroyer is delayed for lack of a skilled workman because he could not find a place to live. We must see that the production of airplanes does not slow down because decent housing cannot be had when needed.

It was with this spirit we all sat around a table in the hot weeks of July to advise regarding ways and means to use the facilities of the established housing agencies.

We knew our defense must be total defense. We had just watched the fall of France, not because she lacked men and materials, but because the social and economic order in France was not sound enough to inspire total defense.

Defense housing is part of the total defense of any nation. Speed is paramount in doing the job, but the speed required is not incompatible with the principles of sound community development. It is as easy to build a house quickly that comes up to adequate standards as to build one that repeats the old mistakes of bad planning. The defense housing program can create neighborhoods which contribute to decent living. Thus we protect our democracy against the internal rot which ruined France. The loyal families of America whose workers are on the industrial firing line, sweating day and night, transforming paper plans into the tangible staff of which defense is made, have a right to expect homes, not just shelters.

Seventy-six days ago, when we first sat down together, there was no coördinated program; there was no money. By working together, we now have both.

PROGRAM

Here is the program. It is based on the premise that the duty of the Coördinator is to see that sufficient housing—private, preferably, but if not, then public—is made available to meet emergency needs with such

dispatch that National Defense does not suffer. This program gradually evolved through individual and collective recommendations from the official advisers of the various housing agencies, the Army, and the Navy.

Our job is not easy, because, while all concur in our primary objective, there are so many ways to reach it we cannot always agree on the best route to take. However, we are now beginning to see that each of us has an important part to play in any coördinated housing program for national defense. The pattern cannot remain a fixed one.

The program, in the main, includes housing for families of enlisted personnel; for families of civilian employees in the Army and Navy; for such single civilian employees of the Army and Navy as have to be provided with housing; for single employees and for families of employees in privately-operated industries engaged in the production of defense materials.

This program has five general categories; (1) Private Housing, (2) the RFC equity purchasing plan, (3) Federal Works Agency, (4) USHA, and (5) the Armed Forces.

1. *Private Housing.* In general, to private industry is assigned the major portion of demand which can pay commercial rents or corresponding purchase payments where the need is considered to be a permanent one. In most of the areas this private portion is being taken up at various rates by building and remodeling dwellings. FHA Mortgage Insurance and Building and Loans Associations, often members of the Home Loan Bank Board system, are very important factors is this field. We are establishing a current inventory to see how completely this market is being supplied. Every step in the program is designed to forestall any definite influence which would prevent private industry from fulfilling its obligations and making the most of its opportunity.

Private capital is being encouraged to act by leaving to it the entire field of housing for sale. Governmental operations are now confined to rental projects. In most cases, the rent per month will be higher than the instalment under the monthly purchase plan.

Furthermore, we are guarding against over-production. As private industry expands its housing operations, it is intended that the Government's will contract correspondingly.

An example of how to prevent overproduction is the use being made of a summer resort within commuting distance of an area of great defense activity. Here the owners of the summer hotels and cottages have been persuaded to keep open all winter.

2. *RFC Equity Purchase Plan:* The allocation of $10,000,000 to RFC Mortgage Company, provides equity capital so that work on housing projects can be commenced immediately in areas where the need to house workers engaged in national defense activities is acute and is not otherwise being met.

These funds can be supplemented by $40,000,000 through the pro-

ceeds of mortgages on such projects insured by FHA under Section 207 of the National Housing Act, making a total of $50,000,000 immediately available. This plan is designed to produce houses more quickly than can otherwise be done with subsequent resale of equities as rapidly as possible.

Land contracts and options have already been signed in some instances. Active negotiations are proceeding in 14 areas on both coasts at the present time where there is a reasonable likelihood that these rental developments can be absorbed permanently into the community patterns.

3. *Federal Works Agency.* The fourth main category will take care of temporary need which none of the other measures are prepared to provide, and which requires direct construction by some Federal agency other than the Army or Navy. The Lanham Bill is aimed at this category of defense housing need, and places administrative responsibility in the Administrator of the FWA. Farm Security may come into play and make available its splendid experience and facilities where housing has future rural use. W.P.A. will also be available for construction of utilities.

4. *USHA—Local Authorities.* In the case of defense housing needed for families of low income, unable to pay commercial rents, and particularly for families of enlisted personnel and low-income industrial workers, where competent local housing authorities exist and where funds are available, it is proposed to make use of such local authorities and of the United States Housing Authority.

Thus the type of housing best adapted becomes a part of the orderly growth of the community because it is developed and operated by local people who know the needs and desires of the families they serve.

5. *Army and Navy.* In general, the best-defined needs for defense housing in connection with specific defense activities are those reported by the Navy and the Army.

It is understood that the Navy will itself build and manage most of its defense housing projects, with assistance from local housing authorities in some cases, and with recognition of the principles above outlined in all cases. The same is true of the Army, except the Army will use Federal agencies for construction more extensively than the Navy.

So much for the program.

While evolved to encourage private enterprise and give to it the larger part of the job to do, it includes an important part for every Federal Housing agency to play.

And remember the public is ready with many valuable and unselfish suggestions.

A truly intelligent contribution to our ends—and the more of a contribution because it has been volunteered—is this analytical study which we see in the hall here today, which has been made by these young architects, men and women, Associates of the Washington Chapter of the American Institute of Architects (now available on request).

They have given generously of their scant time to make these studies —not merely studies of architectural planning—but searching comparisons of our other World War experience, etc., then and now, social and economic complications. . .

Of this work we hope to make good use and on behalf of all of us in defense housing, I thank these volunteers for this very real service they have rendered.

Financing

Now how about the money?

Legislation and cash are needed for such a program. We now have both. The first Ten Million came from the President's emergency funds and went to the RFC Mortgage Company with which to buy equities. As a result, definite progress is already being made in 14 areas as previously explained.

Next $100,000,000 was secured through an amendment to the Defense Bill. Here is how $95,340,000 of that money is already being used.

Underway are a 12,640-dwelling unit program for the Navy; plus 700 units for Maritime Commission, and a 13,900-dwelling unit program for the Army. These will provide housing for low-income civilian and enlisted families connected with naval and military establishments. A large proportion of this need is "temporary" and none of it in the field either of private enterprise or RFC.

Thus, these three agencies, with various assistance from Federal and local agencies, are moving rapidly into the construction of 27,240 dwelling units of defense housing in 110 of the most urgent and critical situations; units which private enterprise could not produce because of the special or temporary nature.

In addition to the above we have the Lanham Bill, our most comprehensive piece of legislation. It meets the needs admirably and provides $150,000,000.

To sum up, after we repay the $10,000,000 which the President advanced to RFC Mortgage Company from his emergency fund, we have left $290,000,000 with which to do what? With which to attack the reported need of 128,791 units in 216 cities of 39 States and 8 possessions.

From facts before us we believe the need will run 160,000 to 200,000 units. If the latter, at say an average of $3,500, the total cost will be $700,000,000. We have $290,000,000. Consequently, it is self-evident how heavily we must lean on private enterprise.

As the program swings into action, so also does coördination. Instead of five site negotiators for as many agencies bidding against each other for land in a given area, purchase is channelled through one, much to the delight of all involved except the avaricious seller, if such there be.

Promiscuous purchase of materials is also on the way out. Centralized buying for thousands of units is now beginning. One dollar per dwelling unit saved with 27,340 now in the works means $27,340 more in Uncle

Sam's purse from this first construction program alone, much to the delight of all involved except the avaricious seller, if such there be.

We must watch every penny. We must make it do its work for the nation. Our aim is to follow normal channels but defense housing must and will be produced.

Our total defense program requires unity. We "cannot concenter all in self" either individually or by agencies. The strength of our country comes from unity. In the 1860's we nearly came to grief through fighting each other to preserve it. If unity meant anything then, just think what it means now.

What we have here in democracy was won for us by our forebears through willing toil, sweat and sacrifice. We must be prepared to protect this heritage perhaps in the same way.

However, we must realize what we are up against. In the world today men and nations misled by brute force or by a burning fanaticism, the like of which has rarely been seen, are ready to throw away their lives.

We can cope with this only if we recapture the spirit of those who built our nation, those who chose the sacrifice for liberty. That is the way we have chosen.

We must work together; we must sacrifice together. Nothing less will do. The proof of such oft repeated appeals by the President is continually reaffirmed.

We are drafted for service as definitely as any soldiers in any cantonments. In defense, housing is vital. Working shoulder to shoulder we can and will do the job which our President has assigned us.

The First Three Years of USHA

NATHAN STRAUS, Administrator, United States Housing Authority, Washington, D. C.

ON NOVEMBER 1, USHA's third anniversary, it was pointed out that "there have already been completed—or are now being built—approximately as many homes as are contained in an entire city the size of Minneapolis."

Since November 1, 1937, when the United States Housing Authority came into existence, Local Housing Authorities have built or placed under construction 109,233 low-rent homes for low-income families. The increase in the number of these local housing agencies is itself an excellent illustration of the growth of the public housing movement. Local Housing Authorities numbered only 46 on November 1, 1937; three years later there were 507 reported from 38 States and territories and the District of Columbia.

Earlier fears that public housing might operate as a depressing influence on private residential construction have been removed by the rapidly rising rate of private building. In 1938, the first year of USHA operation, some 340,300 units of private construction were recorded.

By 1940 the figure had risen to 464,000. In America, as in all other countries, public housing has been accompanied by a substantial increase in private residential construction.

Key to the success of this first direct Nation-wide attack on America's slums is the question of rents. The record, at the end of the third year, shows that rents in USHA projects have been held down to an average of about $10 per month in the South, and less than $15 per month in the North. In every community these rents are as low as—or lower than—slum rents. In every community it is the families in the lowest income group who are leaving substandard dwellings for clean, attractive new project homes. Put very simply, Southern workers who earn as little as $6 a week are able to move their families into USHA homes, while the weekly pay envelope for families in Northern projects averages in some cases as low as $12. With rents and incomes of this type the rule, there can be no doubt that public housing is meeting the need of those who can least afford good homes.

Another test of progress during the last three years is the question of building costs. Here the record shows a steady reduction in all items of expenditure. Average net construction costs, for example, have been gradually reduced to the current figure of $2,479 per house (for 27,178 dwellings placed under construction during the six months ending September 1, 1940). Homes built at such a figure reflect the accumulated experience of Local Housing Authorities during three years of economical construction.

In accordance with the equivalent elimination clause of the United States Housing Act, slums are disappearing as new homes go up. Late reports show that already 43,000 slum hovels have been eliminated, either by demolition or in some other manner. Hundreds of American communities are experiencing the first really basic "clean-up campaign" in our history, as disease-and-crime-breeding areas disappear.

By the end of its third year USHA had loaned practically all the funds made available to it by Congress. Loan contracts had been signed in the amount of $675,097,000 to cover 90 percent of the development cost of 483 projects in 198 communities.

Defense housing projects account for $24,144,000 of this loan contract total. These 21 projects will provide 6,408 homes for families of Army and Navy personnel or of workers in defense industry. Two such projects have already opened—one near Maxwell Field, Army Air Base in Montgomery, Ala., and the other in Pensacola, Fla., where the Naval Air Training Station is located.

The rural housing program of USHA has been under way for only one of the last three years, but loans have been advanced to provide new farm homes for 1,300 low-income families. Already 203 County Housing Authorities have been set up to translate the public housing technique into a working program for rural areas.

The far reaching economic effects of public housing's first three years are beginning to make themselves felt. Some 281,000 workers and professional men have been or will be employed on the 307 projects already completed or now being built. Total payroll for this small army will reach $132,000,000. Materials used in building these 109,233 homes will cost $180,000,000, a substantial order for the building supply industry.

This stimulation of private industry has been accompanied by an equivalent activity in the private financing of public housing projects. Private capital has shown itself eager to invest in the short-term loans of Local Housing Authorities at interest rates averaging one-sixth of what USHA is required by law to charge. During the last year Local Authorities have issued such notes to the amount of $402,408,000, and have realized substantial savings in interest costs.

The last year has been a significant one for USHA from the point of view of subsidy reduction. During the earlier part of the program the full annual Federal contribution was considered a constant factor in achieving low rents. The new attitude is that the subsidy should vary with local conditions. After existing slum rents have been surveyed by Local Authorities, and rental markets thus established, the subsidies are reckoned as the difference between these average rents and the full economic rents which would otherwise have to be charged in the projects. The subsidy thus bridges the gap between what tenants can afford to pay and the economic rent of the project.

Under the greatly reduced operating budgets now being approved, it is expected that full subsidy will not be required for most projects. The average subsidy anticipated is at least 0.7 percent below the legal maximum.

When all economy factors have been taken into account, the net annual cost to USHA of rehousing one family comes to about $76, or $18 to $20 per person.

At the end of its first three years, therefore, USHA is able to report that subsidy costs have been cut quite as drastically as have rents and construction costs, that economy has been enforced on all fronts of the public housing campaign. As slum clearance is accelerated, as the total of occupied homes increases daily, as buildings are completed more and more rapidly (construction time for the first units of the Pensacola defense project was only 86 days), it can at the same time be recorded that all these advances have been paralleled by steady progress towards the greatest feasible economy consistent with decent new homes for America's ill-housed "one-third of the Nation."

The Rôle of FHA

EARLE S. DRAPER, Asst. Administrator, FHA, Washington, D. C.

THROUGH its experience in the field of subdivision planning, the Federal Housing Administration is convinced that the hit-or-miss system of developing residential areas in American cities is progressively giving way to modern methods of planning for harmonious, healthful, and attractive communities.

In 1940 alone, the Administration reviewed plans for developing or rehabilitating considerably more than 3000 subdivisions. From its records in these cases and from its similar activities in preceding years, the FHA knows that important advances are being scored in the quality of neighborhood land planning. More than half of the new homes now being constructed in the United States are located in areas measuring up to FHA neighborhood standards, and this has been true for at least two years.

Planned subdivisions for high-priced homes are not new. But about one-third of the subdivisions reviewed by the FHA's Land Planning Division in 1940 were designed for houses costing under $4000, complete with lot. In more than one instance, subdivision homes, meeting all FHA minimum requirements as to neighborhood and house, have been sold for as little as $1575—at a profit to the developer.

Primarily, the FHA is interested in land planning for the protection of its Mortgage Insurance Fund and Housing Insurance Fund. Its experience indicates that the most satisfactory residential mortgages are found in neighborhoods which have been properly planned and developed and which are protected by suitable covenants.

The FHA's ultimate interest, of course, is in helping the home owner by encouraging improved housing standards and conditions. Largely because of its influence, housing standards today, for homes built with or without FHA-insured financing, are higher than ever before. The Administration recognizes, furthermore, that successful subdivision development must be reasonably profitable to the developers as well as satisfactory to the home owners.

The FHA's basic attitude on subdivision planning is defined by Administrator Stewart McDonald in his foreword to "Successful Subdivisions," the FHA Land Planning Bulletin No. 1:

> From its inception, the Federal Housing Administration has recognized that one of the chief factors in the rapid depreciation of residential values is neighborhood disintegration.
>
> Careful research into the causes of neighborhood blight clearly indicates that such conditions can be greatly retarded, if not actually eliminated, through the application of certain fundamental principles of planning and development.
>
> The developer's success in the long run must depend upon the character of the neighborhood he creates. The successful developer is more than a subdivider of land or a builder of houses. He is a creator of communities. His subdivisions, which are major elements in the community pattern, must possess an appeal that will attract purchasers. These can be created only through intelligent planning and the adoption of a sound development program.

Well planned, suitably protected neighborhoods are not a luxury but a necessity for homes in all price ranges.

Good planning does not add to the cost of land development—it decreases the cost through the elimination of unnecessary streets, the avoidance of excessive and unnecessary grading, and in securing the maximum number of salable lots. The benefits of neighborhood planning accrue not only to the developer, but to the home owner, the investor, and the community at large.

The development of slums, of blighted residential areas, and of depreciated residential property values has been due to a great variety of causes. When moderate or low-priced residential areas have "gone down hill," failure to apply the safeguards generally used to protect high-priced areas will be found to have been an important factor. When a subdivision is unsuccessful, one or more of these weaknesses will be found present:

Premature and unwarranted subdivisions.
Failure to analyze the market properly.
Improper location of the subdivision.
Lack of adequate street improvements.
Poor subdivision design.
Lack of suitable protective covenants.
Lack of community planning and zoning.

The FHA is interested in the long-range phases of planning, for the reason that almost every American city affords illustrations of the depreciation in real estate values which result from lack of community planning and zoning, or the poor administration of such ordinances.

Undesirable or inappropriate uses of land such as occur when business and industrial developments are allowed to invade residential areas, detrimental mixtures of apartments and detached dwellings, introduction of major traffic thoroughfares into subdivisions, and similar conditions quickly break down neighborhood character and impair real estate values.

Without planning and zoning control, many changes affecting property values cannot be foreseen when a subdivision is undertaken. Community planning and land-use control afford the only basis upon which future values and the nature of future development of an area may be anticipated with reasonable assurance.

Study of a large number of good subdivisions demonstrates that the major causes of failure can be avoided or corrected. Every subdivision, however, is recognized by the FHA as an individual problem which requires its own individual treatment. This can be done without violating the fundamental principles of good subdivision planning.

The FHA is interested in coöperating with real estate developers, builders, and their technical consultants in obtaining high standards in land development. The Administration welcomes the opportunity to analyze proposed subdivisions and to make suggestions which, in its opinion, if followed, will create more marketable, attractive, and stable residential properties.

The services of the Land Planning Consultant are available to aid developers in the economical solution of their land planning problems while the program is in the formative stages. This service is limited to giving advice and suggestions, and in no way is intended to replace the services of a professional engineer or land planner. The immediate objective is to establish the conditions for the development of a new neighborhood and to form the basis for the analysis of individual applications for insured mortgages to be secured by proposed properties in the subdivision.

FHA subdivision standards include: (1) convincing evidence of continuing demand for housing in the proposed price range; (2) appropriate surroundings and topography; (3) accessibility to schools, employment, and shopping and recreational centers; (4) suitable utility and street improvements; (5) reasonable taxes and assessments; (6) adequate zoning and protective covenants; and (7) conformity to planning regulations and sound principles of design.

Minimum protective covenants include regulation of land use, architectural control, side yard and setback regulations, regulation of lot sizes, prohibition of nuisances, restriction of minimum cost and area, reservation of utility easements, covenants to run 25 years or more, and suitable enforcement provisions.

Provision for parks and playgrounds in subdivisions is recommended by the FHA. Experience has shown that space for such valuable additions to neighborhood living values can be provided through economies in design, generally without sacrifice of building sites. No good neighborhood can afford to be without public parks and playgrounds.

The FHA's planning activities are largely centered in its Land Planning Division, headed by Seward H. Mott, its Technical Division, directed by Howard P. Vermilya, and its Research and Statistics Division, headed by Shirley K. Hart. The activities of these divisions are reviewed and correlated as to policies by the writer, acting as Assistant Administrator.

In addition to its activities dealing with specific subdivision problems, the FHA is interested in the field of advance planning in relation to critical urban, suburban, and rural housing problems. Under the direction of the writer, several studies in this field are being organized by a competent staff. Also under the writer's direction, defense housing problems throughout the country are being studied and appropriate action taken to relate FHA activities to the defense program. Close coöperation is maintained with the National Defense Advisory Commission.

In its operations during 1940, the FHA established new high records in volume of business under both Title I and Title II of the National Housing Act. Total loan insurance written by the FHA in 1940 amounted to approximately $1,000,000,000, an increase of 5 percent over the

previous peak of $953,824,128 in 1939. This carried the grand total from August 1934 through December 1940 to $4,000,000,000. All these funds were advanced by private financial institutions. The FHA itself lends no money.

Under Section 203 of Title II, approximately 300,000 small home mortgages totaling $1,200,000,000 were selected for appraisal, approximately 200,000 involving $800,000,000 were accepted for insurance, and 175,000 totaling $700,000,000 became premium paying. In 1939, 247,502 mortgages in the amount of $1,123,792,380 were selected for appraisal, 170,112 totaling $737,153,887 were accepted for insurance, and 153,747 for $669,416,154 became premium paying. Mortgages covering new small homes increased to 81 per cent of the total accepted for insurance in 1940 from 76 per cent in 1939.

Under Section 207 and the repealed Section 210 of Title II, 60 mortgages for $15,000,000 on rental or group housing projects providing 4,000 dwelling units became premium-paying, compared with 131 mortgages for $51,340,625 which became premium-paying in 1939, providing 13,342 dwelling units.

Under Title I, 550,000 property improvement loans for $250,000,000 were reported for insurance in 1940, of which 10,000 were for construction of new dwellings. This compares with 513,091 for $233,067,349 reported in 1939, of which 10,783 were for new homes.

Activities of the Federal Home Loan Bank Board

JOHN H. FAHEY, Chairman, Home Loan Bank Board, Washington, D. C.

DURING its operations in every section of the country since 1933, the Home Owners' Loan Corporation revealed the vast inroads of threatened blight in once desirable residential districts, which are costing Americans many millions of dollars each year in loss of investment and tax values.

To protect its own mortgages, and as a matter of sound public policy, for the past two years HOLC has been testing a procedure designed to preserve these inherently sound areas. The plan embraces the establishment of a united front of local home owners, real estate operators, home financing agencies, and civic authorities, with HOLC acting merely as coördinator.

For a concrete test of the neighborhood conservation program, the Waverly district, one of the older residential sections of Baltimore, was chosen. The first step was obtaining a sponsoring local agency for a complete survey to ascertain just what was necessary to restore and fortify residential values in endangered areas, and to provide a pattern which might be applicable to communities in similar sections of the country.

The treatment subsequently recommended for the Baltimore district has narrowed down to two major phases.

(1) The physical rehabilitation—by means of minor repairs and major reconditioning, remodeling, modernizing, embellishment, and landscaping—of all depreciated houses within a selected area.

(2) Adjustment of zoning regulations and street patterns; opening, closing. and widening streets, with traffic and parking reforms; improvement of utilities; increase in park and playground space; the gradual elimination of non-conforming structures; and technical replanning to guide both the rehabilitation of all existing structures and all new structures.

The first phase offers a basis for immediate action; the second, a program extending over the entire life of the community, but both are necessary to arrest a process that has been accepted as almost inevitable despite its huge toll in losses.

The ultimate realization of the program would embrace (1) renovation by HOLC of the properties it owns, and financing by HOLC of improvements on homes on which it holds mortgages, to bring them up to the desired standards, (2) financing by private institutions of similar improvements on homes securing their mortgages, (3) agreement of owners of both mortgaged and unencumbered properties to make improvements, (4) making available to home owners the necessary funds through lending institutions which are members of the Federal Home Loan Bank System and other private loan agencies.

The results of the Baltimore program so far have indicated that neighborhood disintegration in hundreds of cities can be stopped by united action. Many cities have expressed interest in the movement. It is believed that a nationwide program would save millions of dollars in property values and prevent the encroachment of slums into residential sections, and halt the haphazard expansion of industries and business into such areas. The problems and progress of the plan in that city are detailed in a book, "Waverly—a Study in Neighborhood Conservation," soon to be issued by the Federal Home Loan Bank Board.

The millions of American families who traditionally acquire their homes through mortgage loans are now more safely advancing along the road to debt-free home ownership than at any period in our history with which comparison can be made.

As contrasted with the old custom of dangerous short-term, demand mortgages, most of the outstanding home loans have been financed on the long-term, monthly plan of payment, adjusted to the family budget. The borrower is free of the need to negotiate costly renewals at frequent intervals. Extortionate second and third mortgages are well on their way toward elimination. Interest rates have been typically reduced from 1½ to 2 per cent.

An active part in the accomplishment of these ends has been taken by

the agencies under the Federal Home Loan Bank Board, namely the Federal Home Loan Bank System, the Federal Savings and Loan Insurance Corporation, and the Home Owners' Loan Corporation.

At the end of August 1940, the 3,900 member institutions of the Federal Home Loan Bank System held combined assets of $4,910,000,000 which represents an increase of $300,000,000 in the previous 12 months. These savings, building and loan associations generally are in a stronger position than at any time since this reserve credit system was created. During the fiscal year 1940, these institutions made home loans totalling $894,000,000, which is 30 percent more than the total of the previous year.

An analysis of the latest balance sheets of member associations also shows gains in investments received from the public, a greater ratio of earning assets to total resources, and increased liquidity, reserves and undivided profits.

From the beginning of operations to June 30, 1940, the 12 district Federal Home Loan Banks advanced $631,033,000 to members. Contrasted with the outstanding advances of $157,357,000, the borrowing capacity of all member institutions is estimated to be $1,879,000,000. That total suggests the potential activity of the Federal Home Loan Bank System in case of a sustained rise in home building volume. The operations of the System are self-supporting and represent no drain on the public treasury.

Established about six years ago to increase the flow of funds into local home finance institutions, the Federal Savings and Loan Insurance Corporation today protects the savings of 2,600,000 investors in savings, building and loan associations, up to $5,000 each. During the year the Insurance Corporation extended its safeguards to savers and investors throughout the nation. The number of insured associations rose from 2,170 to 2,235. These associations also registered a gain of 41 per cent in the volume of home loans made. During the past fiscal year, the resources of the Federal Savings and Loan Insurance Corporation increased from $119,400,262 to $124,917,101.

National Capital Park and Planning Commission

JOHN NOLEN, JR., Director of Planning, Washington, D. C.

DURING the decade just ended, the National Capital has experienced a 36 percent increase in population, this rate being more than three times that of the previous decade, advancing Washington from 15th to 11th place among the cities of the country. In the Washington Region comprising the territory within about a 20-mile radius of the White House, the increase was 43 percent, making a total population of nearly one million.

Such expansion has naturally created the need for an unusually active planning program centered not only on established long-time objectives but also closely linked with the more immediate problems of the ensuing rapid physical development, for under such circumstances the lack of ordinary social, economic and political perspectives, checks and balances, frequently has created situations which run counter to well thought out plans and planning principles.

The National Capital Park and Planning Commission has two principal functions; first, to acquire such lands as in its judgment are necessary and desirable for the suitable development of the National Capital's park, parkway and playground system within the District of Columbia and adjacent areas in Maryland and Virginia; and second to prepare, develop and maintain a comprehensive regional plan in coördination not only with Federal and District agencies but also those of adjoining States. The wisdom of combining these responsibilities in a single agency, particularly in view of the complex governmental set-up in Washington, has been thoroughly tested and proven.

In its acquisition program for parks, parkways and playgrounds, the Commission has now completed ten years of operation under the Capper-Cramton Act of May 29, 1930. Within the District more than half the authorized funds have now been appropriated, but in Maryland and Virginia a lesser proportion of the authorized amount has been made available. The program has thus lagged considerably behind the schedule anticipated in 1930, with the result that while major objectives have been or are being attained for the most part, the accomplishment has been at increased cost and at some sacrifice of original standards.

In the regional park plan, the George Washington Memorial Parkway, extending from Mount Vernon and Fort Washington 30 miles along the Potomac River to Great Falls, is rapidly becoming a reality on the Maryland side between the District Line and Great Falls. Due to the acquisition of the C. & O. Canal as a P.W.A. project and the financial coöperation of Montgomery County, Maryland, this section is now 37.5 percent complete, requiring only about $400,000 for remaining

acquisitions, for which funds are now in prospect. Plans for a divided parkway road parallel to the Canal are being developed in coöperation with the Public Roads Administration and the National Park Service. A preliminary plan for the section in Prince Georges' County between Fort Foote and Fort Washington has also been prepared.

The Commission has actively sought to secure more adequate protection for the Mount Vernon Memorial Highway above, below and through Alexandria. New development along the Memorial Highway in Alexandria has for the most part been governed by the agreement between the City and the United States, providing that the city will coöperate in securing private development "in keeping with the dignity, purpose and memorial character of the Highway." Below Alexandria the Commission has requested the reappropriation of an unexpended balance of Memorial Highway funds to acquire land between the road and the river south of Hunting Creek and to obtain additional protective strips elsewhere.

During the current year the National Park Service has completed development of the Rosslyn Plaza and the additional span over Key Bridge as a part of the Memorial Parkway. The C. & O. Canal has been opened for recreational use between Washington and Seneca, a distance of 22 miles, and the War Department has transferred to the Park Service the entire 341 acres in Fort Washington.

In coöperation with the Maryland Commission and the United States Engineer Office, plans for a joint park and flood control project in Anacostia River Park beyond the District Line have been developed which will also coördinate with the route for the Baltimore-Washington Parkway extending along the northeast branch of the Anacostia Valley. Except for a relatively short strip between Bladensburg and Greenbelt most of the right-of-way for this parkway is now in public ownership to Fort Meade. Request has been made for funds to close the remaining gaps in the Washington region.

Within the District of Columbia the Commission has now acquired about 90 percent of the land for the Fort Drive, a 23-mile parkway encircling the city. Following a review of the Commission's plans for this development by Jay Downer, former Chief Engineer of the Westchester County Park System, plans have been revised to compare favorably with similar recent parkway development in other cities. It is now proposed to construct the road as a divided highway with center parking strip, and wide radius curves, and with less interruptions to free flowing traffic at cross streets by providing additional grade separations. The Commission is recommending the immediate construction of those sections which will provide the greatest traffic benefit in relation to the existing street system and stimulate the development of vacant land.

During the fiscal year 1940 somewhat over $1,000,000 has been expended for land acquisitions for parks, parkways and playgrounds in

the District. These have included, besides the Fort Drive, several playgrounds and recreation centers to serve congested areas and a number of stream valley parks in outlying sections. As an adequate new playground has been provided in each of the four quadrants of the original city, attention is again being centered on projects in the outlying areas where the pressure of private development makes acquisition urgent.

In the development of the city and regional plan the Commission's activity has centered on plans for public buildings in the central area, the development of up-to-date zoning regulations for Washington and adjoining jurisdictions, and the formulation of a preliminary "metropolitan area plan" containing a number of new proposals of major importance not heretofore included in the regional plan. Following a recommendation of the Commission, the President submitted to Congress for the first time a proposal for an office building east of the Capitol where for many years the Commission has advocated the redevelopment of East Capitol Street. While Congress deferred action at this time, the proposal has stimulated interest in the Commission's plan, which is now being reviewed by the Federal Works Agency. Other public building proposals of the Commission included acquisition of land for a State Department Annex north of the present building, a site for the Coast Guard on the Washington Channel waterfront, and sites for a West Central Heating Plant and the General Accounting Office, appropriation being made for the last two. Approval was also given to the Commission's plan for a memorial garden to Oliver Wendell Holmes in the rear of the Supreme Court Building as a part of the general East Capitol Street plan.

The outmoded 1920 Zoning Regulations are being completely revised in coöperation with the Zoning Commission and with the assistance of Messrs. Bartholomew and Bettman, the Commission's consultants. During the year the Commission advocated an off-street parking proviso in connection with all multi-family developments and also the elimination of the height district exception permitting construction above the 110-foot height limit.

Some of the many other planning activities of the Commission included coöperation with the Alley Dwelling Authority in the location and layout of low-cost housing projects; coöperation with the District Commissioners in the design of grade separations at Scott Circle and 14th Street and Maine Avenue in the down-town area. On its legislative program the Commission was active in securing passage of a bill transferring Arlington Farm to the War Department and providing for the acquisition of additional land in accordance with a plan for protecting and developing the approaches to Washington from Virginia. Since the inception of the national defense program the Commission has also been active in securing coördination of defense projects with its plans whenever possible. A representative of the Commission has been appointed to one of the committees of the D. C. Defense Council.

Public Housing in the District of Columbia

WORK OF THE ALLEY DWELLING AUTHORITY IN 1940

JOHN IHLDER, Executive Officer, Washington, D. C.

THE year 1940 was one in which the work of previous years began to come to fruition. As a result The Alley Dwelling Authority now will be able to illustrate by actual experience in the District of Columbia the results of different proposals made by proponents of public housing.

The Authority's first properties are financed in accordance with Title I of the Alley Dwelling Act. This means that they are expected to be self-supporting, the rents charged for them covering all costs, including city taxes. Under Title II of its Act, The Alley Dwelling Authority on April 1 leased Langston from the United States Housing Authority. Langston was built by the Housing Division of the Federal Emergency Administration of Public Works and was transferred to the United States Housing Authority when a permanent policy of public housing was inaugurated in 1937. So the first financing was on the basis of PWA's 45 percent write-off of construction cost. But when USHA took over the property it put into effect its practice of charging rents designed to cover only maintenance, repairs, operation and administration. This practice of ADA is continuing while studying its effects not only in terms of property finance but also in terms of tenant response. Also under Title II the ADA has, after three years of discussion, secured USHA's consent to a system of graded rents for properties financed by loans and subsidies from the United States Housing Authority. This ADA considers the most significant achievement of the year.

Meantime there has been substantial progress toward the ADA's objective of a city without slums and with an adequate supply of decent dwellings for all families of low income. Families of low income include all those whose incomes are insufficient to cause private enterprise to build for them in an adequate amount. So private enterprise sets the ceiling for public housing in Washington. The floor is families with no income. At present this floor can not be quite reached because of the terms of the United States Housing Act.

The Authority's present construction program includes approximately 3,000 dwellings in 10 projects. Two of these projects; Fort Dupont Dwellings and Ellen Wilson Dwellings, are nearing completion and are being occupied as fast as groups of houses are finished. Two others; Frederick Douglass Dwellings and Carrollsburg Dwellings, are under construction and will be completed early next year. Three others; Kelly Miller Dwellings, James Creek Dwellings and Parkside Dwellings have reached the stage of final plans, and contracts will soon be let. Of the three remaining projects, two are in the acquisition stage, and one—where the ADA wishes to try an experiment in very low cost housing—is still in the stage of discussion with USHA.

Acquisition usually is by purchase but on some sites there are a few owners who demand more than the ADA considers their property is worth. So there have been six condemnation suits during the year in all of which the awards were close to the ADA's appraisal. Twice the question of constitutionality has been raised and in both cases decided in ADA's favor. In one case, however, an appeal was taken. If ADA loses on this appeal it will carry the case to the Supreme Court of the United States for final adjudication.

The graded rent system adopted by the ADA is quite different from other systems now in operation. As in the case of its Title I properties, the ADA determines the economic rents. By economic rents it means rents that will pay all costs including city taxes. If every dwelling on a property paid an economic rent that property would be fully self-supporting. Economic rent differs from commercial rent in that it does not include profit. Having established the economic rents, the ADA then utilizes the subsidy (USHA annual contribution, which under the contract between USHA and ADA may be from 3 percent to 3½ percent of the total project cost, plus remission of city taxes) to reduce the rents of some of the tenants according to their incomes.

In the practical application of the subsidy the ADA began by ascertaining the lowest income upon which a family can maintain itself in the District of Columbia. Cost of living in the District of Columbia is high. The Authority decided that $55 a month is the very least for a small family, $66 for a family with three or more minor dependants. The United States Housing Act practically requires that income from rents shall be sufficient to maintain and operate a property and also states that a tenant family's income may not exceed five times rent for small families or six times rent for large families. These requirements set the lowest practicable rent at $11 a month.

Beginning with this lowest rent for the lowest income families, rents are raised one dollar a month for each five dollar increase in family income until income gets to the middle grades. Then rent is raised $1.50 a month for each $5 increase of income. In the highest grades rent is raised $2 a month for each $5 increase of income. This is on the ground that cost of food, clothes and other necessities remaining fairly constant, a family can afford a larger proportion of its increased income for rent. Each rental increase, of course, decreases the amount of the subsidy required until, when a small family reaches the $1,440 income level, subsidy ceases entirely and that family pays a full economic rent. If a family's income decreases, the reverse process is followed.

A result of applying this system was to decrease the required amount of subsidy. Under the contract the ADA is entitled to a 3¼ percent annual contribution from USHA. Under this system it is now asking for only 2.49 percent. Even this percentage could be reduced had not USHA requested postponement of all economic rents during the first

year. So it was agreed that no tenant shall now be accepted whose income exceeds $1,320, or in case of large families, 20 percent more. Consequently all the first tenants will pay graded rents. But if, after being accepted, a tenant's income increases, he may remain, with increase of rent, even though his increased income goes above $1,440. After that he is expected to move if private enterprise has provided an adequate supply of proper dwellings for rent at one-quarter of income.

This graded rent system takes frank account of two economic facts: the cost of the property, which is reflected in the economic rents; the cost of living in the District of Columbia, which is reflected in the lowest graded rent. It meets some of the most serious objections to the prevalent method of applying the subsidy by a straight write-down of all rents.

During the years when the ADA was seeking converts to its graded rent proposal there were dire prophecies that its application would mean jealousy among tenants who were receiving like housing for different rents. So far at least this jealousy has not appeared, perhaps because the system is fully and frankly explained to all applicants. Apparently there is willing acceptance of a higher rent than that charged a neighbor when the schedule is shown to the applicant and he is told that rent is based on income. This seems to him fair. In one case when an applicant had found his place on the schedule, he said, "But I am expecting a raise. What will happen to me then?" When he was told to look at the next line on the schedule and found that his rent would be increased one dollar a month, he said that was fine. He feared he might be evicted.

The prevalent system of straight write-down of all rents to the full extent permitted by the subsidy makes public housing available to only a thin stratum of our low-income population. Rent is definitely fixed and incomes can be only five or six times its amount. Yet rents must be sufficient to maintain and operate the property. Even when the low-income stratum is made as broad as possible, say from $800 to $1,100, the assistance given to the $1,100 family is just as great as the assistance given to an $800 family. Moreover, when the $1,100 maximum—if that is the maximum set for a property—is exceeded, the family must move out, whether or not suitable dwellings are available elsewhere. This has resulted not only in attempts to conceal income increases, but even in refusals to accept higher wages because acceptance meant eviction.

The problem presented by straight write-down of all rents has become so generally recognized that in the spring of 1940 USHA accepted the policy of a differential in rents, which several local authorities at once applied. They now have two, three or more rents instead of one for each size of dwelling. By accepting new tenants at the lowest rent they can permit these tenants to remain, with some rent increases as incomes increase. But this modification of the original system does not clearly reflect the cost of the property or the cost of living and it does not provide for systematic progress up to the level of full self-support.

REGIONAL PLANNING

EDITOR'S NOTE.—The Progress of Regional Planning in 1939–40 was prepared at our request for the AMERICAN PLANNING AND CIVIC ANNUAL. Dr. Raver's paper on Regional Industrial Trends and the Pacific Northwest was presented at the National Conference on Planning, in San Francisco, July 8–11, 1940.

Progress of Regional Planning in 1939-40

JOHN MILLER, National Resources Planning Board, Washington, D. C.

THE past year of regional planning has brought a new six-State Planning Commission in the Southeast, major new joint studies of regional water resources in Florida and the Southwest, and a Congressionally established Interstate Commission on the Potomac River. During the same period, while preliminary arrangements were made or actual work launched upon these new activities, continued progress was made by the established regional groups of New England, the Pacific Northwest, the Northern Lakes States, and the Northern Great Plains, as well as those in such river basins as the Delaware, the Ohio and the Pecos.

The proposal that an interstate regional planning commission be established in the Southeast has for several years been of interest to the Atlanta field office of the National Resources Planning Board. During the past year the proposal became a reality with the appointment of state representatives by the Governors of South Carolina, Georgia, Florida, Alabama, Mississippi and Tennessee. At the end of June plans were being made to complete the Commission's organization. The National Resources Planning Board has made available to it the services of its Atlanta field office staff, and the Commission will work in close collaboration with the state planning boards of the six States. During the coming year the new Commission, third of its kind in the United States, will launch the regional program now being formulated in preliminary meetings.

The older New England Regional Planning Commission and the Pacific Northwest Regional Planning Commission, whose success inspired the creation of the new Southeastern group, continued during the past year to develop and strengthen their established programs. In the Northeast the Regional Commission started a major study of land-use and potential economic activities, looking eventually to the revision and refinement of its New England Regional Plan. Across the country, in the Northwest, the Regional Commission is finishing the second year of the most ambitious study which it has yet undertaken. This large-scale inquiry covers the Northwest's future economic opportunities in land-use and industrial development, the development of public works plans and programs, and the improvement of administrative procedure with respect to public works and development programs. In addition to

this study, which is entering its final year, the Commission is actively participating in the more intensive planning study now in progress in the Columbia River Basin under the leadership of the Bureau of Reclamation.

Meanwhile, in the Great Lakes cut-over area and in the northern Great Plains, two major regional planning groups continued their activities through the year. The Northern Lakes States Regional Committee devoted 1939–1940 largely to the formulation of detailed regional work programs, based upon the recommendations of its underlying 1939 report, for each of the coöperating Federal administrative agencies of the three-state area. The preparation of these complementary programs, in collaboration with the respective agencies, marks a long step toward putting the Committee's original recommendations in concrete form, while their completion represents in addition an important contribution to regional planning technique in other parts of the country.

The Northern Great Plains Committee, which completed its original report in late 1938, continued in 1939–40 to function as a clearing-house for state and Federal activities in the area, and to take the lead in organizing new studies found to be necessary. An important part of the Committee's work lay in making preliminary investigations of projects constructed under the Small Water Facilities Act passed by Congress pursuant to the Committee's report. In its capacity as an interstate clearing-house for regional research, the Committee played an active part in negotiations looking to interstate agreements upon the Yellowstone and Republican Rivers. The Committee disbanded upon the conclusion of its activity at the end of June. Negotiations were then started by the National Resources Planning Board's Omaha field office, looking to the organization of a permanent interstate regional planning commission to carry forward the work which the Committee started.

The year likewise brought two new endeavors in a second important field of regional planning, that type of regional study made jointly by a group of Federal and state agencies. The more advanced of these is the Southeastern Florida Joint Water Resources Investigation. This study was necessitated by the rapid increase of population in South Florida, which has for years been taxing the capacity of surface and underground water supplies upon which the region depends. It will undertake to discover the measures available to meet the pressing problems of diminishing water supplies, and the related problems of pollution, salinity, drainage and soil erosion. Actual work upon the study began in February, 1940, with the Federal Departments of Agriculture, Interior, and War, the cities of Miami, Miami Beach, and Coral Gables, Dade County and the Everglades Fire-Control Commission participating. The joint project is sponsored by the Florida State Planning Board and the National Resources Planning Board, which have established in Miami a coördinating office for the purpose of maintaining contact between

individual investigation programs of several agencies. The program of every participating agency will have been started by the end of 1940, and it is expected that the Investigation will be completed late in 1942.

The second new project, still in a tentative state, is the Lower Rio Grande Joint Investigation. The Rio Grande, below Fort Quitman, Texas, drains a rapidly developing area the size of California, of which more than half is in Mexico. The allocation of limited water supply among the increasing and varied demands of agricultural, industrial and domestic use is consequently posing serious problems of regional and international significance. During the summer of 1940, the Legislature of Texas appropriated a sum of $35,000 as the State's share of a comprehensive water survey in the Lower Rio Grande area. This appropriation was contingent upon the provision of Federal matching funds in the amount of $250,000.

The proposal for a study of the Lower Rio Grande was suggested in part by the example of the Pecos Joint Investigation now in progress to the north and west. This study is jointly supported by the Federal Government and the States of New Mexico and Texas. Now at the end of its first year of activity, the study is in full stride. When the individual program of each participating agency is completed, the final comprehensive analysis of the area's water problems will provide the most concrete basis which has yet existed for the negotiation of a Pecos River compact between Texas and New Mexico.

The past twelve months have brought a new development in still a third field of regional planning—the active interstate river basin authority. Inspired by the successful example of the Interstate Commission on the Delaware River Basin, civic and professional groups of the Potomac Valley obtained Congressional approval in 1937 for Virginia, Maryland, West Virginia, Pennsylvania and the District of Columbia to enter a joint compact creating a Conservancy District for the abatement of pollution. During the past year the proposal advanced several steps nearer to realization, when Maryland, Virginia and West Virginia ratified the compact, and the Council of State Governments established a special field office to carry on the new Commission's affairs until a permanent organization could be established. Under the guidance of a temporary interstate Committee, this office has started the work of assembling data upon which a program of public action can be based. In the event that the District of Columbia and Pennsylvania ratify the compact during 1940–41, the new Interstate Commission on the Potomac River Basin promises to take its place as a model of pollution abatement and basin planning through use of the interstate compact.

The year has seen progress, also, toward final adoption of the Ohio River Water Sanitation Compact, designed to combat the serious pollution problem of the Ohio River Valley. Since 1936 when Congress authorized the States of the Valley to enter an agreement for this

purpose, the legislatures of Indiana, Illinois, New York, Ohio, and West Virginia had adopted the compact in some form. In the past year the compact has been approved by each house of Congress, while Kentucky has become the sixth State to ratify its provisions. This leaves but two States yet to take action, and during the coming year every effort will be made to obtain complete acceptance and clear the way for establishment of an active Interstate Commission.

A prospective development of wide significance for regional planning is the enlarged public works programming activity projected by the National Resources Planning Board, administering the provisions of the Federal Employment Stabilization Act of 1931. As a part of this new program, each of the Board's nine field offices will prepare a six-year program of Federal public works for the region in which it operates. The field office will be responsible for annual revision and extension of this program, which will be maintained for the guidance of the President and the Congress. The preparation of the public works program will be preceded in each region by the preparation of a regional development plan, upon which the program will be based.

While the primary attention which the Board will place upon public works programs in 1940–1941 represents a new emphasis in its activity, its previous work provides an excellent basis for this programming. This is especially true of the regional approach which will be used by each field office in preparing a Federal public works program covering the States of its area. Throughout the last five years each field office has been studying in a variety of ways the advantages, the weaknesses, the problems and the prospects of its region. During the past year, each office has devoted a large amount of time to the formulation of a careful statement of the objectives—X-point programs—for the development of its area. Each statement, prepared in consultation with Federal and state officials, leading citizens and technical experts of the region, has served to bring into focus the vast thought which has already been given to the region's problems.

With this work completed, the Board will launch during the next year the most detailed regional planning activity which it has yet undertaken, the maintenance of six-year regional programs of Federal public works, based upon long range regional development plans. This work will be observed with interest as one of the outstanding regional planning activities of the coming year.

Regional Industrial Trends and the Pacific Northwest

PAUL J. RAVER, Administrator,[1] Bonneville Power Administration, U. S. Department of the Interior, Portland, Oregon

The Pacific Northwest has only begun to appear as a new region of potential industrial growth. Its extremely underdeveloped industrial status will probably be ameliorated to some extent by population expansion stimulated through the irrigation project at Grand Coulee, and by the attraction of electrochemical and electrometallurgical industries to the largest new supply of low-cost electric power in the country. Northwest development, however, is handicapped by the lack of a regional coördinating and promotional agency.

Had our peace-time industrial evolution been permitted to continue, it is likely that we would have recognized shortly the need for eliminating conflicts and waste in regional industrial developments through national and regional guidance. The urgencies caused by our shift to a defense economy leave open the desirability of regional defense boards that could become the predecessors in the future of regional industrial boards.

A few months ago this discussion of regional aspects of national industrial development could have concentrated on problems of a peace economy. The industrial economics of national defense would have been of growing but subsidiary importance. Today, the position is reversed. Our regional industrial trends are being moulded toward serving the purposes of national defense or a war economy. The billions of dollars that are now being spent in this country by foreign buyers and the additional billions they may spend, together with our own expenditures, will clearly overshadow and probably displace some of the current industrial developments in our peace economy. Whether the war abroad ends this year or continues for some time, it seems evident that military economics will increasingly affect us for some years.

Under these circumstances, perhaps the most useful purpose that this discussion may serve would be to view the Northwest within the highlights of recent regional trends in industrial development, to indicate the most significant influences on these trends, and to relate them to the adjustments that now appear likely.

Regional Trends in Manufactures. The national trend in the number of manufacturing wage earners has been downward since 1919. Three regions have moved counter to the trend if we take the year 1937 as our point of final measurement. In that year, the number of wage earners exceeded any previously reported year—including 1929—in the East North Central States around the Great Lakes,[2] in the South including

[1]With the collaboration of Samuel Moment, Economist, Market Development Section.
[2]Ohio, Indiana, Illinois, Michigan, Wisconsin.

the South Atlantic[1] and the East South Central states,[2] and in the Pacific Coast states. All the gain on the Pacific Coast was concentrated in California, and that State may be regarded as a region in itself.

But more significant than the trends in the number of wage earners are the trends when related to population. If we take as an index of regional manufactures, wage earners per 1,000 population in each region as a percentage of the national average,[3] we find rising trends in the regions already mentioned and the most important declining trends in the New England and Middle Atlantic states.[4]

As the regions stood in 1937, the index of manufacturing wage earners as a percentage of the national average was still high in the East, being 177 percent in New England and 131 percent in the Middle Atlantic States. The East North Central States were at a level of 149 percent. Those below the national average but coming up were the South Atlantic States at 87 percent, the East South Central States at 53 percent, and California, at 75 percent. The other regions were either declining or showing no clear trends. The Pacific Northwest—Idaho, Washington, and Oregon—showed no definite trend, and its index in 1937 was 86 percent and slightly below the index for 1929. This index of 86 percent does not indicate a reasonably developed industrial status when it is recalled that the Northwest is annually supplying over 40 percent of the value of lumber and timber products produced in the United States. Altogether, the wood products industries in the Northwest accounted in 1937 for 63 percent of the manufacturing wage earners of the region. If we remove them from the comparison, the adjusted index of manufacturing wage earners in the Northwest, relative to population, was only 36 percent of the national average.

Processes in Regional Trends. In the expansion and contraction of various regions, certain processes of location have been taking place, some involving industries making products already known, others involving industries making new products. The major processes affecting old industries have been (1) the branching of existing plants into other regions, (2) the establishment in some regions of new firms competing with old firms of other regions, (3) the expansion of the business of existing firms at the expense of existing firms in other regions—that is, the normal effects of interregional competition, (4) the physical migration of a few plants and their managements through closing down in one region and reopening in another, and (5) the displacement of the products of old firms by entirely new products made in other regions by new industries.

[1]Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.

[2]Kentucky, Tennessee, Alabama, Mississippi.

[3]Another measure could be based on value added per capita; the results would not be materially different. See appended tables 1 and 2.

[4]New York, New Jersey, Pennsylvania.

The effects of new industries, of course, have been outstanding. Where the new products have displaced old products, one region may have benefited at the expense of another. Thus, the expansion of rayon textiles in the South has been a partial cause of the decline of cotton textiles in New England. Where the new products have provided entirely new services, not materially displacing old goods, the expansion has not injured other regions. Such has been the case of airplane manufacture in Southern California.

I have stressed these processes of location because we need more information on how they have been working out in various industries and how they have been affecting various regions. The study of the Metropolitan Life Insurance Company for the years 1926 and 1927[1] indicated that the establishment of new firms and branch plants of old firms was far more numerous than relocations of old firms. But these findings were not comprehensively analyzed and might not apply to the same extent in recent years.

Promotional Influences Upon Regional Trends. In the evolution of these regional industrial movements conscious planning has played a negligible role. The most apparent factors in the expansion of the Middle West, California, and the South, partly at the expense of the New England and Middle Atlantic states, have been the changing distribution of population and the shifts of workable natural resources. The special rôle of low labor costs in the South is also well recognized.[2] The descriptions of how these factors have exerted their influences, their mutual interrelations, and the complications supplied by other factors[3] are not reducible to a few generalizations. The one obvious observation we may make is that regional industrial planning was absent. It was not needed when the major preoccupations of the country were to explore resources and invent new products and technologies—to find out what we could do with what we had.

But within the past few years, the Federal government, groups of States, individual States, and local chambers of commerce have employed more consciously various measures to influence regional trends. On the national level, Federal policy has begun to affect directly the South and the Northwest. Through the Tennessee Valley Authority, measures are being taken that will materially further the industrial development of the Central Southern States. General measures of the TVA in effecting lower power costs, controlling soil erosion, contributing

[1]Civic Development Committee of the National Electric Light Association and the Policyholders Service Bureau of the Metropolitan Life Insurance Company, *Industrial Development in the United States and Canada, 1926 and 1927.*

[2]Daniel B. Creamer and Hermann K. Brunck, *Pattern of Industrial Location* in Carter Goodrich and others, *Migration and Economic Opportunity*, p. 317; Frederic B. Garver, Francis M. Boddy, Alvar J. Nixon, *The Location of Manufactures in the United States, 1899–1929*, pp. 167, 234; Tracy E. Thompson, *Location of Manufactures, 1899–1929*, p. 14.

[3]Glenn E. McLaughlin, Growth of American Manufacturing Areas, Ch. 5; National Resources Committee, *The Structure of the American Economy*, p. 41.

to the navigability of the Tennessee River, sustaining the forests, and guiding farming methods will increase the general income of the affected States and their accessibility to outside markets. They will be able to buy more industrial products, manufacture more for their own markets, and sell elsewhere more of what they produce. Specific measures of the TVA in developing fertilizers, designing special agricultural machinery, promoting research on frozen foods, plastics, china clay, and other products have already encouraged private capital to initiate new private industries.[1]

In the Northwest, some industrial expansion should result from the national policy of developing multi-purposes of the Columbia River through measures of flood control, irrigation, inland waterway, and low-cost power developments. But the problems of expansion are complicated at present by the absence of any coördinating regional agency. I shall defer this subject to the last part of this discussion.

On the regional level, we have seen the efforts of two groups of States to promote their industrial development. The New England States have had some of their common problems studied and their industrial interests publicized by the New England Council since 1925. The Southeastern States have protected and advertised their interests through the Southern States Industrial Council formed in 1933 and through the more recent Southern Governors' Council. The activities of these groups have included participation in freight rate cases, advocating Federal and state legislation respecting taxes and labor, engaging in or promoting research affecting industrial development, and encouraging businessmen and chambers of commerce in industrial promotion. We do not know how effective their activities have been in maintaining or extending the amount of manufactures within their regions.

From the individual States, a barrage of promotional literature has been issued in recent years. Among the typical pamphlets, Arkansas is advertised by its Centennial Commission as "A New Industrial Horizon," and "A Strategic Site for Decentralization." Pennsylvania is described by its Department of Commerce as "The Keystone of Industry." The Division of State Publicity of Indiana proclaims that Indiana is "The Center of Almost Everything," and demonstrates by drawing around the State a circle that contains 90 percent of the population of the nation. Pennsylvania in its pamphlet draws a more modest circle, but Arkansas draws a series of circles, and the outermost one includes the entire country. Among other States recently advertising their industrial advantages are New Jersey, Illinois, and Mississippi.

The cities also are participating in this movement although their

[1] *TVA, Its Work and Accomplishments;* David E. Lilienthal, address on *The Restoration of Economic Equality Between Regions of the United States,* before the Southern Newspaper Publishers' Association, Mineral Wells, Texas, May 21, 1940; and *Business Week,* May 25, 1940, pp. 26–32.

efforts are part of the long-established promotional work of their chambers of commerce.

Barriers and Inducements to Industries. Far more significant than promotional publicity have been the actions of many States and communities to encourage local industries through the erection of barriers to trade from other States and through subsidies, tax concessions, and other inducements. The subject of trade barriers is receiving analysis in the Marketing Laws Survey of the Works Projects Administration, and pressures to reduce them are originating through the Council of State Governments.[1] While many of these trade barriers have arisen in connection with agricultural products, a few particularly affect manufactures. These barriers include the anti-oleomargarine laws, a variety of laws designed to encourage local liquor industries, and laws giving preference to state building materials and state products used in state institutions.

A complementary policy to the erection of barriers appears in the growing number of inducements and tax concessions to industries offered both by States and communities. Inducements have included free factories and sites, cash bonuses, and participation in financing capital needs.[2] Tax concessions have an old history originating in New England after the Revolutionary War, and they have now been widely adopted in the Southern States.[3] Most notable among industrial programs was that of Mississippi to balance agriculture with industry, in effect from 1936 to June 1 of this year. Under the Industrial Act of 1936, cities and counties could finance and operate new industries which would be tax-exempt for five years. The results of this program through June of 1939 were the addition of ten new industries creating jobs for about 4,000 persons. The program was allowed to die because of opposition by a new governor to subsidizing private industry with public funds.[4]

No clear-cut appraisal of the over-all effects of inducements and tax concessions upon regional industrial trends has been made, and the practical difficulties would be very great in conducting a survey to form such an appraisal.[5] Inconclusive results were obtained in surveys made by the city of New York and the Pennsylvania legislature,[6] and a study for Massachusetts by the Commission on Interstate Coöperation found offers of inducements to emigrating plants to be a minor factor in the

[1] *Proceedings of the National Conference on Interstate Trade Barriers*, April 5, 6, 7, 1939, The Council of State Governments.

[2] Chamber of Commerce of the United States, *Special Inducements to Industries*, 1931, and *Community Industrial Financing Plans*, undated.

[3] National Association of Assessing Officers, *Exemption and Preferential Taxation of Factories*, 1939.

[4] *Business Week*, April 13, 1940.

[5] Harold M. Groves, *The Effect of Tax Differentials and Tax Exemption Upon The Relocation of Industry*, Proceedings of the National Tax Association, October 24–28, 1938, and Tax Policy League, *Tax Policy*, October, 1937.

[6] Tax Policy League, op. cit.

industrial decline of the State.[1] Of course, in the case of migrating enterprises or new industries considering various locations, those that carefully appraise alternative costs of doing business would be influenced by tax concessions and other inducements provided these gains were not offset by other higher costs.

Effects of Interregional Differences in Basic Costs. Most fundamental upon regional differences in industrial development have been the influences of the basic costs of transportation to markets and wage rates. The artificial nature of the interterritorial and intraterritorial freight rate structure applicable to manufactured goods has been pointed out by the Tennessee Valley Authority.[2] This structure, the result of historical evolution rather than costs of transportation, has given the Northeastern States, bounded by the Mississippi and Ohio rivers and the Atlantic Coast, advantages in shipping into other regions at lower rates, distance considered, than rates applicable to shipments within other regions. Likewise, the Eastern States have enjoyed rates within their territory lower than those applying to shipments over equal distances from other regions into the East. The general effects have been those of a protective tariff against shipments of manufactured products into the East from other regions, and a subsidy to the East in shipping into other regions. Thus, an historical development, not until recently given the attention it deserved, has long operated to restrict industrial growth outside of the Eastern or official freight-rate territory.

Now, however, national attention is being focused upon the problem. An opening wedge was driven to force freight-rate readjustments on manufactured goods from the South to the North as a result of the Southern rate case, initiated in May, 1937, and decided by the Interstate Commerce Commission in November, 1939. The decision was not clear-cut, being five to four with two commissioners not participating, and the line of reasoning was certainly not consistent, as pointed out by dissenting Commissioner Eastman.[3] However, an opening was gained toward reconsideration of the entire rate structure on manufactured goods, and in July of 1939 the Interstate Commerce Commission ordered a comprehensive investigation of the interterritorial freight rate structure

It would thus appear that if political pressure from all States outside the Eastern territory plus the inherently sound economics of the issue are ultimately to prevail, the South and the West will gain a relative reduction in the costs of shipping manufactured goods, both within their boundaries and to the East, and some stimulus should result to their industrial growth.

Another readjustment in regional differences in manufacturing costs

[1]Final Report of the Commission on Interstate Coöperation to the General Court concerning the *Migration of Industrial Establishments for Massachusetts*, 1939.

[2]*The Interterritorial Freight Rate Problem of the United States*, 1937.

[3]Interstate Commerce Commission, Docket 27746, decided November 22, 1939.

has more definitely begun through the effects of the Fair Labor Standards Act on wage rates. The effects of this act are to raise labor costs in the South relative to the North and West, perhaps offsetting to some extent the gains the South may obtain in freight rate adjustments. Analysis of the number of wage earners in manufacturing industries covered by the act receiving less than 30 cents an hour in April, 1939, shows that in all regions other than the South, less than five percent of the employees were affected by the first wage increase required under the act. But in the South Atlantic States the percentage was 17, in the East South Central States it was 27, and in the West South Central States it was 22.[1] Extension of the provisions of the act in the future will continue to affect the South more than other regions.

Another great change in regional cost differences involves electric power, and affects the Northwest favorably. The wholesale rates of the Bonneville Power Administration are now the lowest in the nation, and if the power to be generated at Grand Coulee is sold at similar levels, the Northwest will have a decided advantage in competing for a special group of electrochemical and electrometallurgical industries—those in which the cost of power ranges from 10 to 50 percent of the selling price of the final product. As I shall point out shortly, in no other region of the country is there available any new supply of power comparable in amount and cost to that of the Northwest.

Less Obvious Influences. There is another set of influences upon regional development that has not received much attention. First, there is a lack of information in many regions regarding their industrial potentialities. They lack knowledge of the extent of their internal markets for manufactured goods that they now import from other regions, knowledge of their resources and of the variety of ways to utilize them. Regional capital ordinarily hasn't sufficient information to appraise many industrial investments that are economically feasible. The orthodox economic theory that capital is mobile and readily moves into new opportunities is not realistic today. Mobility and aggressiveness were obvious characteristics of capital as the population moved westward accompanied by a wave of technological advances and new investments. Now it takes much more investigation, ranging from the work of research departments of large corporations to the marketing services of advertising and engineering agencies, to disclose markets and sound investment opportunities.

Second, there are the interests of monopolistic groups and large investments in one region that restrain competition from developing in other regions, even if such competition were to be confined to supplying only the markets of those regions. For example, the markets for tin

[1]Derived from *Estimated Number of Workers in April, 1939, Subject to Provisions of the Fair Labor Standards Act Effective October 24, 1939*, United States Department of Labor, Bureau of Labor Statistics.

plate in the Western States and territories amount to over 400,000 tons annually, of which less than 10 percent is supplied from one small mill in California. Under present conditions of a concentrated market controlled by two can companies and the supply to that market dominated by two steel producers, it would be a hazardous enterprise for an independent steel company to establish a large tin plate mill on the Pacific Coast. Other instances might be cited of the indirect effects of control over patents and essential raw materials and of price control mechanisms, such as the basing-point system, that restrict interregional competition and the fullest economical development of each region. In general, monopolistic situations among individual industries have not been consciously directed by such industries against regions but have been aimed at competition regardless of its location. The incidental effects have been against the interests of certain regions primarily because of the concentration of industry in the northeastern United States. The efforts of industries in the Northeast to protect themselves through monopolistic practices have probably resulted in some net protection to that region merely because most of our manufactures are located there. Along with this situation, we might also add the more conscious sectionalism that seeks to promote one region regardless of fundamental economic considerations and the total interest of the nation. The opposition of the Northeastern States to the Southern governors in the rate case already referred to, and the relatively greater opposition to the Fair Labor Standards Act from Southern congressmen than from Northern congressmen are symptoms of regional monopolistic influences whereby one region seeks to maintain or gain an advantage over another region without regard to national interest. Obviously, if we are to adhere to the sound theory that the most economical development of our natural resources and the most economical location of our industries lead to the greatest national income and welfare, then we must advocate the withdrawal of regional restrictions whether they originate through monopolistic practices in industries or through political sectionalism.

Position of the Northwest. On this national scene of interregional movements of industrial growth, the Pacific Northwest has only begun to make its debut. As I previously indicated, the index of manufacturing development (exclusive of wood products) relative to the national average was only 36 percent in 1937. The Northwest, like the South, has been a colonial empire of the East and Middle West. While the South concentrated on the raw materials of cotton and tobacco, the Northwest specialized in cutting down its forests and making products of wood for the Nation, and in shipping its minerals to the East. Most of the manufactured goods it consumes have come from other regions.

Just as continued mining of the soil without changes in farming practices and without a development of its mineral and industrial potentialities would only extend the impoverishment of the South, so a

continuance of trends in the Northwest would only create in a generation another declining region. In the Northwest, man, fire, and disease are still destroying commercial timber faster than it grows. Without a change in forestry practices or the introduction of new employment possibilities, within thirty years the source of income of about 30 percent of the population of 3,500,000 would largely vanish.

That is why the current and prospective developments of the Columbia River are of extreme importance. First, the irrigation project of the Bureau of Reclamation at Grand Coulee will, over a period of 10 to 20 years, provide 1,200.000 additional acres of farm land. This is 60 percent of the estimated additional land that could be reclaimed in the Northwest through irrigation, drainage, and clearing, after allowance for the retirement of submarginal land. Grand Coulee will thus provide for about 20,000 additional farms directly supporting about 100,000 persons and indirectly stimulating service industries to support another 100,000.

Such an increase in the population of the region would facilitate the production of some of the manufactured goods now imported from the rest of the country. But a more immediate stimulus to industrial growth should arise from the power projects on the Columbia River. Bonneville and Grand Coulee will, if generating installations proceed as planned, add in ten years about 2,400,000 kilowatts of generating capacity to the Northwest, an amount 170 percent greater than the existing capacity in Oregon and Washington. If, as is reasonable, all this power is made available at or near the present rates of the Bonneville Power Administration, nowhere else in the nation will there be a comparable supply of low-cost power. But looking still farther ahead, the Bonneville and Grand Coulee power projects will make available only 19 percent of the potential power inherent in the Columbia River and its tributaries. Translated into kilowatt hours, the potential annual output of the Columbia River Basin is 90 billion kilowatt hours, an amount equal to the output of the entire electric utility industry of the United States in 1929.

The industrial effects of power development in the Northwest will necessarily be specialized at first, attracting mainly those industries that require large amounts of power—the electrochemical and electrometallurgical industries. Among these are aluminum, electrolytic zinc, magnesium, ferrochrome, and calcium carbide. The establishment of such industries, one of which—aluminum—has already been started, should be followed by auxiliary industries, some supplying materials needed by these industries, others taking their products and processing them. But we should recognize that this anticipated development would provide only a moderate increase in employment and does not assure the type of large-scale industrial growth more likely in the South.

We should also recognize that the Northwest is greatly handicapped

by the absence of any regional coördinating agency with the powers to promote needed research into markets and industrial processes using Northwest power and raw materials. It is not enough for the Nation to build dams at Bonneville and Grand Coulee and make power available. The uses to which that power can be put in the best interests of the region and the country should be studied and promoted in the light of the resources available to the Northwest and the effects upon other regions.

The Economics of National Defense. Having reviewed the major regional industrial trends and influences affecting them, we are not able to appraise our position as we shift from a peace economy to a national defense economy. We are making this change with no well-defined concept of what kind of industrial development in peace time should be best advocated for each region and through what agencies it should be promoted. There is no organization investigating such problems nor are there any with executive authority to influence regional trends in a way that recognizes not only what is desirable for some regions but what repercussions would occur in other regions. On a regional level, the Tennessee Valley Authority alone is operating effectively for the benefit of certain Southern States. On the state level, various States have turned to an examination of their industrial possibilities and toward industrial promotion, but the States cannot take an adequate view of what is economically sound for the interests of the regions to which they belong and the Nation as a whole.

Competition between States and communities for industries through tax concessions and special inducements and through the erection of trade barriers has, from the national view, undoubtedly included some wasteful effort. Barriers or inducements not resulting in the most economical locations[1] have represented a national loss in excessive costs of production, whether ultimately borne by consumers, by industry, or by the affected communities. Barriers and inducements happily leading to economical locations would have been unnecessary if industrial promotion were confined only to providing facts and minor services.

With respect to unwarranted interregional differences in freight rates and their effects upon regional industrial development, we are now becoming aware of the problem, and the Interstate Commerce Commission is investigating it from this new viewpoint.

Of course, every region has existing and potential industries consistent with the urgencies of national defense. In the Northwest, our existing industries include shipbuilding, aircraft and engine manufactures, electrolytic zinc, lead and cadmium, and copper. These may expand harmoniously with our present regional advantages. Of greater concern to each region are its potentialities. Among Northwest potential

[1]Carle C. Zimmerman, *Industrial Migration From the Standpoint of Sociology,* Proceedings of the National Conference on Planning, May 15–17, 1939, p. 47.

industries, there is a group of materials strategic to national defense regarding which the Bonneville Power Administration has received inquiries or evidence of concrete interest. These include ferrochrome, aluminum and magnesium, calcium carbide and derivatives, elemental phosphorus and derivatives, chlorates and allied products, and tin based on Bolivian and possibly Alaskan ores. Most of these products require large amounts of electric power. Obviously, such potentialities and those of other regions cannot expect now to receive the deliberate consideration possible in time of peace. Yet, we can expect some of them to materialize out of the momentum of promotion already under way.

Finally, there is a group of industries feasible for the Northwest in the event national policy decides that the West should have certain defense industries to supply and protect its own area as well as to supplement production in the rest of the Nation. These include high purity iron, steel and alloys for ordnance; brass for munitions; war gases and chemicals for explosives, including atmospherically fixed nitrogen. All of these products can be made from resources in or accessible to the Northwest, and most of them require large amounts of power.

With respect to the present Federal power projects in the Northwest, it is obviously in the interests of national defense that they be linked under one authority in a regional system mutually to support each other. The planned installations of additional generating units at the Federal projects should be expedited in order to provide for expanding power demands, particularly some that may become necessary in the event of power shortages to meet needs in other parts of the country.

Looking now at the nation as a whole, it is evident that while thoughts of planning for a peace economy are receding into the background, machinery for the national planning of a war economy is being erected. This machinery at present is concentrated in Washington. But officials in Washington cannot know all of the potential contributions that each region can make and the relative costs of each, and congressional representatives are not equipped to be ambassadors for regional economies. There would accordingly appear to be a place for regional defense boards concerned with the contributions to national defense that each region can make and with presenting appraisals and recommendations to the defense authorities in Washington. From the operations of such boards we might learn about the problems of regional industrial guidance and profit in the future when we hope we can face the peace-time issues of regional industrial trends.

BONNEVILLE POWER ADMINISTRATION,
Market Development Section, Economic Unit, June 7, 1940.

Table 1. INDICES OF REGIONAL INDUSTRIAL DEVELOPMENT: Ratio of manufacturing wage earners per 1,000 population in various regions to the United States average for specified years, 1899–1937.

REGION	1899	1909	1919	1929	1935	1937
United States	100.0	100.0	100.0	100.0	100.0	100.0
New England	245.7	233.7	212.9	187.1	185.3	176.7
Middle Atlantic	167.5	158.9	150.2	135.6	134.1	130.9
East North Central	108.3	115.3	130.0	139.8	142.9	148.9
West North Central	41.5	44.7	45.9	49.6	46.0	45.7
South Atlantic	70.8	75.6	67.9	80.3	90.3	87.1
East South Central	37.9	43.3	43.0	53.2	52.4	53.3
West South Central	28.0	32.4	32.3	34.0	30.4	32.4
Mountain	42.9	39.8	37.0	38.5	31.8	34.1
Pacific	82.2	70.7	89.6	78.6	76.1	80.4
Eleven Western States	66.1	58.8	69.9	66.1	62.7	66.5
Pacific Northwest (a)	70.1	68.9	92.1	92.0	80.1	86.0
California	83.9	67.4	81.1	69.3	71.0	74.5

(a) Idaho, Washington, and Oregon.

SOURCE: Based on the Census of Manufactures; the decennial census of population, 1900–1930; and mid-year population estimates of the Bureau of the Census for 1935 and 1937.

BONNEVILLE POWER ADMINISTRATION,
Market Development Section, Economic Unit, June 7, 1940.

Table 2. INDICES OF REGIONAL INDUSTRIAL DEVELOPMENT: Ratio of value added by manufacture per capita in various regions to the United States average for specified years, 1899–1937.

REGION	1899	1909	1919	1929	1935	1937
United States	100.0	100.0	100.0	100.0	100.0	100.0
New England	212.8	196.4	184.8	153.5	152.1	146.9
Middle Atlantic	179.5	166.5	160.2	149.3	144.9	141.9
East North Central	118.6	128.6	140.2	152.5	159.1	164.1
West North Central	49.5	52.1	47.0	54.4	52.5	49.2
South Atlantic	47.6	52.3	56.0	60.2	62.5	62.9
East South Central	31.0	37.7	31.5	36.2	38.0	37.8
West South Central	23.9	29.9	30.0	30.2	29.8	31.9
Mountain	71.6	55.4	38.6	38.7	35.7	39.7
Pacific	91.7	90.0	96.6	85.9	87.5	88.4
Eleven Western States	83.5	76.6	74.9	71.2	71.8	73.8
Pacific Northwest (a)	71.8	79.5	91.8	80.7	74.2	80.6
California	98.0	92.8	92.5	84.9	90.2	88.7

(a) Idaho, Washington, and Oregon.

SOURCE: Based on the Census of Manufactures; the decennial census of population, 1900–1930; and mid-year population estimates of the Bureau of the Census for 1935 and 1937.

IN THE STATES

STATE PLANNING

EDITOR'S NOTE.—Mr. Miller, at our request, prepared the Resumé of State Planning Activities in 1939–40 for the AMERICAN PLANNING AND CIVIC ANNUAL, in order to give our readers a brief account of what actually is going on within the States in the planning field. Mr. Buttenheim's able paper on a Program for the Use of Tax-Abandoned Land, was presented at the National Conference on Planning, San Francisco, July 8–11, 1940.

A Resumé of State Planning Activities in 1939-40

JOHN MILLER, National Resources Board, Washington, D. C.

WHEN the National Resources Board suggested in 1934 that the States set up planning agencies for the programming of public works, the response was so rapid that within the year 42 state planning boards were organized. Today, there are 39 boards established by statute, and in six additional state advisory boards have been appointed by Governors. While the funds received by these boards vary, they averaged in 1939–40 about $15,000 annually. In addition, the state boards received some aid from the National Resources Planning Board and from the WPA.

While the aggregate program carried forward by these 45 boards during 1939–40 has touched upon almost every phase of public interest, no single board has been active in every phase. Since land and water are basic fields of state planning, most of the boards have continued in the past year to study the problems connected with use of these resources. These state land-use studies remain primarily directed to the accumulation of basic data on existing conditions, utilizing real property inventories, land ownership studies, tax delinquency surveys, inventories of publicly-owned land, and land-use mapping studies. At the same time increasing attention has been devoted to analysis of the material gathered and in a small but growing number of instances, the boards have developed specific administrative and legislative recommendations on the basis of their studies. An example is the Oregon study of forest problems, which will include proposed legislation for forestry administration, fire protection, reforestation, private ownership and grazing rights. In Montana, the State Planning Board is coöperating with a number of Federal and state agencies in the preparation of a comprehensive program for rehabilitation of the eastern part of the State. While the year showed growing progress in active state land planning, however, the general emphasis of the state boards continued to rest upon the gathering of basic information looking to future use in constructive planning.

Virtually the same situation may be observed in state water resources planning. The boards have undertaken extensive programs for the collection of basic data, while relatively few studies have reached the

stage of constructive proposals. Two-thirds of the state planning boards are carrying on hydrologic studies, water law studies, stream flow surveys or some other type of water resources studies. An outstanding example, the Wyoming State Planning and Water Conservation Board, is required by statute to allocate three-fourths of its appropriation for coöperation with the Bureau of Reclamation or other Federal agencies in studies of the water problems of Wyoming. During the past year, one of the Board's major projects has been an analysis of the litigation between Wyoming and Colorado over the waters of the Laramie River, in an attempt to develop a feasible solution. The Mississippi State Planning Board has completed the second year of work on a comprehensive study which will lay the base for a rehabilitation of the proposed State drainage system.

Studies of mineral resources have naturally been limited to localities in which the problems of mining predominate, and for this reason less work has been undertaken upon this subject than upon the preceding ones. During the past year the Colorado State Planning Commission has located and mapped the State's known deposits of coal and petroleum, with the extent to which each area has been worked. In the far North, the Alaska Planning Council is engaged in a comprehensive survey of mineral resources, and has related to this basic study its analysis of the Territory's transportation, employment and taxation problems. The Missouri State Planning Board has undertaken a study of the relation between mineral and human resources in the tiff mining area of Missouri. The displacement of hand miners by the introduction of machinery has created a large population group in need of new vocational opportunities. Upon the State Planning Board's study will depend the solution of this growing economic problem.

Partly as the result of increased attention to problems of national defense, aviation has lately become the primary subject of state transportation studies. In coöperation with the Civil Aeronautics Administration, a number of state planning boards have studied state aviation facilities, and prepared plans for airports and airways. But while aviation has predominated in the transportation studies of the past year, it has not done so to the exclusion of other transport problems. In another direction, the Massachusetts State Planning Board completed a study of highway problems in the Boston metropolitan area. State planning boards of the Mississippi Valley have advanced their plans for a Mississippi River Parkway, and the Idaho State Planning Board is preparing a state-wide highway program. Minnesota, Arkansas, and a few other Midwest States are at present working on railway freight-rate problems.

During 1939–40 almost a third of the state planning boards have carried on some type of industrial study. In some cases the boards have initiated the collection of basic industrial data essential to comprehensive

studies, while in other cases intensive studies of particular industrial problems have been made. In Kansas, Pennsylvania and Connecticut studies have been made of trends in the location of industry, and the distribution and migration of manufacturers. The Maryland State Planning Board has recently completed a series of "Economic Studies," picturing population change in the industrial sections of the State, the shifting importance of the State's industries, and state employment, wage and price trends. As the industrial development and informational divisions for these States, the planning boards of Mississippi, New Hampshire and Vermont assist suitable industry to locate in the State by making available up-to-date information on skilled workers, factory locations and other promising features. One of the outstanding industrial studies is that being made by the New York State Planning Council. This study of industrial migration will be the Council's major activity for the coming year. The Nevada State Planning Board has completed a study of the State's potential power market, while the Wyoming Board made a survey of sugar-beet growing and sugar manufacturing.

The most intensive planning thus far attempted for a single region is the Columbia Basin Joint Investigation now in progress under the leadership of the Bureau of Reclamation prior to settlement of the large area being opened to farming by completion of the Grand Coulee Dam. Among the state, regional and Federal agencies responsible for special subjects of the study is the Washington State Planning Council. The Council is making studies to determine the adequate standard of living for settlers, the feasibility of village industries, the location of public institutions, and the pattern of local government and land-use.

Since population is a fundamental national resource, population studies are sources of information basic to all planning. The number of these studies made by state planning boards, however, has not been great. Possibly the most important population study thus far attempted is that initiated during the past year by the Virginia State Planning Board. This survey will require four years to complete, and its results will provide the best available basic data on Virginia's population problems. The study will include migration of industrial population, reproduction trends, and changes in the population's composition.

The problems of housing, health and education are closely related to those of population, and these three fields likewise are just being entered by the State planning boards. The Nebraska and Virginia State Planning Boards are currently making outstanding studies of state educational problems. A committee of the Nebraska Board has completed a report on the administration, curricula and facilities of the state public school system. The survey will be used as the basis for revision of Nebraska's 10-year building program. In Virginia, the State Planning Board is collaborating with the State Department of Education in a survey of the present and prospective construction requirements of the State

Teachers Colleges. As a part of the same study the Board is making an administrative analysis of the State normal system. An additional study of secondary school location has been undertaken at the same time, looking to a reorganization of the school transportation system.

The state planning boards' studies of health problems are in general limited to surveys of the need for public institutional construction. But at least two studies of a different sort have been made by the West Virginia State Planning Board. The first of these is a study of the domestic hazards of carbon monoxide gas, while the other is a study of the operation of private welfare agencies in the city of Fairmont. The second study, which was sponsored by the agencies in question, was designed to promote the efficiency of local welfare administration. The first major state planning board study in the field of housing was completed during the year by the California State Planning Board. The only other work in this broad subject was that being done by the North Carolina State Planning Board in connection with its Real Property Inventory.

In marked contrast to the lack of activity in other fields related to population problems, almost half of the state planning boards, in coöperation with the National Park Service, have taken part in a nation-wide study of parks and recreation. In addition, the New England States and Florida have been active in the study of recreation industries because of their particular interest in the tourist business.

State planning board studies of the problems of governmental administration have been concentrated in the field of public finance. The Vermont State Planning Board is completing a study of local finance which covers tax valuations, rates, and delinquency, and the public indebtedness of each Vermont municipality. A similar study is in progress in New Jersey. The Pennsylvania State Planning Board is completing an extensive study of the taxing bodies of Pennsylvania's minor civil divisions. Studies of local government income and expenditure are in progress in Wisconsin and Minnesota. A broader study of local government is that being made by the North Dakota Advisory Resources Board of cities, towns and villages of over 1,000 population. This study involves the analysis of personnel, financial and administrative procedures. In a slightly different area of public administration, the Tennessee State Planning Commission has prepared a state personnel system, at the Governor's request. The Utah State Planning Board is studying state government expenditures, and the Arkansas Board is working with the County Assessors to effect more equalized property assessments.

Unlike those planning activities in which the state planning boards are typically engaged in accumulating basic data for general use is the fast-growing function of public works programming. In performing this work, the state planning boards are rapidly assuming an active rôle in the coördination of state administrative agencies. The increased

volume of this work has resulted in part from the assistance provided by the National Resources Planning Board in its administration since June 1940 of the Federal Employment Stabilization Act. This Act charges the Board with the maintenance of a six-year program of Federal construction, and in addition with the encouragement of public works programming by state and local governments. Under its provisions, the Board has encouraged the state planning boards to undertake the preparation of long-range state public works programs. Technical consulting aid for the preparation of state public works programs has been provided to the state planning boards of certain States in which outstanding opportunities for the successful completion of such a project existed. These experimental-stage programming ventures will provide a basis of experience for the refinement of a state programming technique, and in this respect they will serve the same function as the seven demonstration projects in municipal programming sponsored by the Board's Public Works Committee during the previous year. Since July 1940, seven state planning boards have inaugurated comprehensive long-range programming projects, in Massachusetts, Maryland, Virginia, Alabama, Montana, Idaho, and Oregon. Continuing earlier activity of a somewhat similar nature, the Wisconsin State Planning Board and the Colorado State Planning Commission are revising long-term public works programs for their States.

State mapping, the collection of basic statistical data and the inventory of research resources have always been fundamental to planning activity, and such projects continue to be numerous. The planning boards of West Virginia, Kentucky, Missouri and Washington have recently worked on studies of research facilities and programs within their States. These studies are particularly valuable in demonstrating the sources of information available for the boards' use. General mapping projects covering such data as irrigated areas, drainage basins, highways, forests, land use, minerals and farm units, are in progress in a number of States. Special data are also being compiled by the climatology study of the Mississippi Board of Development, the Georgia State Planning Board's cadastral and geodetic surveys, and by the Illinois State Planning Commission's state property survey.

An important phase of the state planning boards' activity is their participation in the work of planning agencies at other levels of government. Two outstanding examples of regional coöperation among state planning boards are provided by the studies of migration problems now going forward in the Pacific Northwest, and of rehabilitation problems in the Northern Lakes States cutover area. Intra-state regional planning is exemplified by the studies of the Rhode Island State Planning Board. Upon completion of regional studies in the six sub-regions of the State, the Board expects to turn over the basic data collected in its study to local planning agencies. Another intra-state regional study is that which

the Wyoming Board is making of the Wind River Valley. During the past year the Board has completed a study on the Thermopolis Hot Springs and it is now at work on a study of dairying, in relation to the Valley's future development.

Almost every state planning board gives some aid to local planning bodies. Among the local planning projects recently undertaken by state planning boards, there have been a number of studies for comprehensive planning of localities. The Massachusetts Board has completed a planning study of the hill towns of Worcester County. In three cases, the State Planning Boards are assisting towns, forced to remove from reservoir sites, in planning for complete relocation. The towns to be rebuilt are Hill in New Hampshire, Greenville in Missouri, and Marcus in Washington. Similar assistance is being provided in Albany, Georgia, following tornado disaster in that town. Planning for towns and cities dislocated by the influx of workers on projects of the Tennessee Valley Authority has been continued with the aid of the Tennessee and Alabama State Planning Commissions.

At least three general developments in the trend of state planning may be observed from this hasty description of highlights in the past year's acitvity. Of greatest significance is the accumulating evidence that State planning agencies are advancing from the initial, basic survey phase of their work into the more advanced stages of constructive planning or active coördination. While the work of assembling descriptive data goes forward, as it necessarily must continue to do, the boards are devoting a steadily increasing proportion of their effort to the interpretation of existing conditions in the light of prospective problems, to the preparation of tangible plans in anticipation of these problems, and to the orientation of administrative programs upon the basis of those plans. Each successive year sees the state planning board more widely recognized as the chief research agency of state government, the center of a state-wide web of more specialized private and public research organizations.

Of equal importance is the widening scope of the state planning boards' concern, and the growth of social planning. The early concentration upon physical planning, for land and water, has inevitably widened and has deepened as the planner's path led to the people who live on the land, and the industry and commerce which utilize the water and navigate the rivers. This trend has accompanied the progress of state planning from basic-data surveys to constructive planning, for the problems of active planning demonstrate the interdependence of structures and people, or of physical and social planning, with a force which did not reside in the prior work of the basic survey. Reciprocally, the accumulation of basic data, with more adequate funds and staff for planning, was an essential prerequisite to constructive planning.

A third trend, the necessary accompaniment and inevitable result of

the first two, is the growing strength of coöperative relations between the state boards and the regional and Federal bodies on the one hand, and with state and local agencies on the other. Constant vital relationships between state planning boards and planning or administrative agencies at all levels of government are the condition and the consequence of their effectiveness. Their growth and profusion constitute encouraging evidence that state planning is flourishing.

One recent development in State planning remains to be mentioned. Early in August, 1940, in a letter to State Governors, the National Defense Advisory Commission recommended that the state planning boards be designated as the research arms of the state defense agencies. Pursuant to that suggestion a number of state boards have been asked to serve as defense research agencies, and are now performing various tasks in the defense program. In New York and Kansas, the Planning Boards are making surveys of idle plant facilities and production capacity, and compiling directories of manufacturing establishments for use in the industrial defense efforts of those States. The California, Tennessee, and Virginia planning agencies are carrying forward special research and fact-finding work for the defense councils of their States. Another example is the Arkansas State Planning Board which has set up special defense committees composed of experts upon man-power, agriculture, forest and mineral resources, manufacturing plants and equipment and transportation facilities. The wisdom of using the state planning boards, apparent now, will be increasingly evident when the emergency is over, for their experience will be invaluable to guide an harmonious return to peacetime economic conditions.

A Program for the Use of Tax-Abandoned Land

HAROLD S. BUTTENHEIM, *Editor*, The American City, New York City

BY CLAIMING land the lucky among our pioneer forefathers acquired individual wealth; by reclaiming either the land or its socially created income must their successors—lucky and unlucky—help to make community well-being more prevalent and permanent.

Through the era of America's first settlement the land-gambler's survival may not have been an unmixed evil. But with the end of that era his failure to become extinct or fully domesticated was an oversight which the era of America's resettlement must find means to correct.

For it is into an era of resettlement and reclamation that we are now entering. This era will involve, in the decades immediately ahead, not only the conservation and redevelopment of vast rural regions, but the rebuilding of large areas in most American cities. To fell the trees in the primeval forests was the task of our colonial pioneers. To fell the tenements and the shacks in our obsolete urban jungles is the task of their descendants.

To the task of the forest-clearer the lure of free land was a potent stimulus. To the task of the slum-clearer the lure of increased public or coöperative ownership of land, combined with a rational tax system, might be equally potent. In the 1940's our municipal and county governments will be short-sighted indeed if they fail to pick up bargains in their own tax-delinquent real estate and to use such acquisitions in the public interest, rather than to allow the old game to continue of the buying up and subsequent exploitation of distressed properties by land-gamblers.

Conclusions and Recommendations

1. In a few States—notably New York, Michigan, Ohio, and Arkansas, in 1939, and California in 1940—legislation has recently been enacted for more simple, speedy and less costly procedure in the public acquisition of tax-abandoned land, and for conserving the public interest in the future disposition and use of such land. Practical experience under these laws will doubtless suggest further refinements in the States mentioned and offer helpful ideas for other States, such as Illinois, where, to quote Walter H. Blucher, "the laws are so complicated that nobody knows when property becomes tax-delinquent or what kind of title a purchaser can obtain."

2. There is a widespread and understandable desire on the part of municipal and county governments to get tax-foreclosed property back on the tax rolls. In few places, however, is adequate consideration given to the extent to which such property ought to be retained permanently in public ownership.

3. Planning boards in some States have given special study to problems involved in the excess subdivision of land and in tax-delinquency, and to the best uses to which increases in the public domain, resulting therefrom, could be put. Such studies might well be made a major activity of all state and local planning boards. Prior to foreclosure of tax-delinquent properties it would seem advisable that they be mapped by the planning board or the municipal real estate office, if any, and charted for their best potential use—whether for retention for specific public purposes or for municipal land reserves, or for sale to private developers, or exchange for other land of greater public usefulness.

4. When public bodies sell tax-abandoned land, too little thought is usually given to such questions as (a) whether the sales price is not too low; (b) whether by thus dumping property on the market other real estate values in the city or county will not be needlessly depressed; and (c) whether the property is likely to stay sold or soon again to become tax-delinquent.

5. A comprehensive approach to problems of tax-delinquency would concern itself not only with what to do when land has become tax-abandoned, but with methods of making tax-delinquency less prevalent

in future. The remedies here would include more effective control than is generally practiced over land-subdivision and land use, thus discouraging settlement in either rural or urban areas which would involve needlessly expensive governmental services. In most cities legislation is needed to prohibit the sale of land in any new subdivision unless the platter has paid in advance the cost of installing all utilities and also paving, curbing and sidewalk, if needed.

6. Such a comprehensive approach would also involve less inequity in real estate assessments, more efficient methods of tax-collection (including monthly or quarterly instalment payments), and a restudy of our American system of real estate taxation. The result might be the gradual adoption, under a graded tax plan, of lower rates on improvements, thus encouraging new building and the modernizing of existing structures, instead of penalizing such improvements as at present.

7. In considering possible public uses of tax-abandoned land, thought ought to be given to the need for so rebuilding our cities as to enable them to compete more efficiently than at present with the suburban trend which is everywhere evident. This would involve: larger park and playground areas; much more off-street parking space than most municipalities possess; street widenings; and in many cases the demolition and replanning of slums and blighted areas. For such uses municipal land reserves, made up partly of tax-abandoned land, would be very useful. Pending decision as to ultimate use, land reserves might be made temporary sources of public revenue by being leased—say for five years under competitive bidding—for private recreation, gardening, parking lots, or other purposes.

8. Since all municipalities own some public land and many are being increasingly forced into the real estate business, the establishment, in every large city at least, of an efficient public real estate office is to be recommended. Included in the powers of such an office might be sale for private use on a cash or credit basis; and the exchange, under proper restrictions, of tax-forfeited parcels for privately-owned parcels, as suggested by Mr. Horwitz, to facilitate the enlargement of publicly-owned areas and the vacation of premature subdivisions. I share also Mr. Kizer's belief, below quoted, that if marginal lands were retired from private use, the value of lands remaining in private ownership would advance in value, with a consequent increase of tax revenues.

9. The laws of many States need amendment, not only to safeguard the public interest in tax-delinquent land, but to prevent the hardships now often resulting to private owners, temporarily embarrassed financially, who suffer unjust losses at the hands of speculators in tax liens.

10. Finally, this whole problem needs much more thorough compilation of data and more definite proposals for remedies than have been possible in this study, to which the present compiler has been able to devote only a few occasional hours in the midst of other pressing duties

I am glad to learn from Carl H. Chatters and A. M. Hillhouse, of the Municipal Finance Officers Association, that they are now working on quite a comprehensive monograph dealing with the collection of delinquent taxes and the management or disposition of tax-reverted properties. As soon as this monograph and the proceedings of our San Francisco Conference are published, I believe that the four organizations affiliated with the National Conference on Planning could render an important public service by appointing a joint committee to study this whole problem of tax-abandoned land and to recommend action thereon to state and local planning boards. Merely worrying about the problem will not produce the remedies so urgently needed.

Two Major Questions

In an effort to secure some up-to-date information for this paper, I asked several planners, tax officials, and others for data as to:

1. The best and worst features of existing state laws relating to the public acquisition of tax-delinquent land and the powers of local governments to use, lease or sell such land.

2. Present practice or needed improvement of method in bringing such land into public use or restoring it to a taxpaying status.

Excerpts from 16 replies follow:

Statement by Benjamin H. Kizer, Chairman, Washington State Planning Council

There are few "best features" of existing state laws pertaining to tax delinquent lands. This for the reason that little or no thought has been given to the matter. Nature just takes its course.

In our State the County Treasurer on behalf of the county, State, city and school district collects all real and personal property taxes. When property has been delinquent for five years, it is sold and bought in by the county unless some private party bids for it, which is not frequent. Tax-delinquent lands are managed by the board of three county commissioners, usually two farmers and one city man, but, in any event, men entirely unacquainted with city problems, although five-sixths of the population of the county and at least 75 percent of the delinquent property is located in the city of Spokane.

County commissioners change frequently. They are poorly paid and the men elected to office are almost invariably without political experience. As each group comes in, the bright idea occurs to them—something no one else in their experience has ever thought of—to show some enterprise in selling tax-reverted lands at *any* price just so as to get them back on the county's tax rolls. They sell some, not as much as they expected, at ridiculously low prices. The rural land is nearly all marginal and in due time wanders back as tax-delinquent land, and its second foreclosure sometimes costs as much as ever was taken in by the sale, for the purchaser merely roosts on the land without paying taxes once he has bought it for a song, and five years later it is tax delinquent again.

The sale of city lands in this wholesale fashion usually knocks down other realty values in the vicinity, and the result is a reduction in taxable values that loses more in annual revenue than is gained either by the sale of the property or the possibility that it will bring in a little tax revenue.

By the time a group of county commissioners has been educated by such a procedure, they go out of office and the whole dreary course of enterprise and stupidity runs its course again.

So far as marginal rural lands are concerned, each State should make a careful land-use survey and should retire its marginal lands rather than to sell them to some poor sucker on the gamble by the county that he will starve to death trying to live there. The county

wins the gamble too often. As to all city and county lands, the assessor and treasurer should sit with the chairman of the board of county commissioners as a group to develop policies of sale, since these men are usually more experienced and have a wider background of knowledge of what ought to be done than do the county commissioners. It would aid, of course, if the state board of tax commissioners, which develops state policies and has more continuity than any local official, had some measure of control over the sale of tax-reverted lands, or in a given case over their transfer to the State to be used for forest projects, recreation, and so on. Actually the values of land remaining in private ownership would advance if these marginal lands were retired from use. The city and county tax revenues would be thereby increased and the unwary would not be tempted to part with their meager savings to acquire worthless land.

Statement by T. S. Hedges, Commissioner, Washington State Tax Commission

The problem of the use of tax-abandoned land begins, in our opinion, long before the land becomes tax-abandoned. In other words, much of the land that is foreclosed for taxes or for local improvements has either been assessed at too high a value or the improvement assessments that have been placed upon it have added a weight of cost that the land will not economically stand. . . . There is a rather too common belief on the part of assessors that because one piece of property, either in a city or in the county, sells at a certain sum, all other similar property in the neighborhood is of an equivalent value. This idea must always be modified in proportion to the possible use of the total area available and this angle is all too frequently not considered. . . .

It may be said, however, that the laws of many States make it obligatory, to a greater or less extent, that the State furnish services to all of its citizens, partly in the way of roads, schools, etc. When persons settle in remote and sparsely populated areas and then demand the same type of services that are given in more congested areas, the price of such services, per unit, is very greatly augmented. Naturally, far-sighted officials tend to discourage settlement in areas where governmental service costs are apt to be extremely high.

The laws in different States governing the public acquisition of tax-delinquent land vary greatly. We think that we may say that Washington is in rather better position in this regard than most States, though perhaps not quite so fortunate as a few. . . Property in Washington is very seldom foreclosed until the taxes upon it are at least five years delinquent and we think the people of this State, practically always, have an ample spread of time within which to protect themselves against foreclosure, if their economic circumstances or the land itself warranted the original investment. Tax titles in this State are exceptionally good and title insurance is readily issued upon them.

Statement by R. E. Riley, Commissioner of Finance, City of Portland, Oregon

(Commissioner Riley sends me a copy of an address on "Getting Delinquent Properties Back on the Tax Roll," which he delivered before the annual conference of the Municipal Finance Officers' Association of the United States and Canada in August 1938, with figures revised to May 15, 1940. Excerpts from this paper follow.)

In Oregon, when owners fail to pay general taxes on their property, it is, after due process of law, sold by the county for such taxes. When the property is sold by the county at tax sale it is offered to private purchasers. If there are no private bidders, then all property remaining unsold is struck off to the county in lieu of delinquent taxes.

The Supreme Court of Oregon has ruled that this sale to the county wipes out all other interests, including the claims of municipalities for local assessments. Since the property is the security for the outstanding improvement bonds, the city cannot stand by and allow the property to be sold to the county, thereby wiping out its lien. Briefly, this explains how the city of Portland got into the real estate business. . . .

By means of a charter amendment in 1918 there was created an Assessment Collection Fund with a capital of $1,500,000 as a rotating fund to facilitate the collection of delinquent improvement assessments. This fund is managed by the Delinquent Tax Bureau, which is headed by the Commissioner of Finance by appointment of the Mayor. One of the first problems of this bureau was to find ways and means through the city's legal department to build a plan which would perfect the legal title to these properties and make them market-

able. The city attorney assigned one of his deputies to this particular task, who, with a staff of four persons, is slowly clearing up these titles.

The next step was to market these properties. Originally the bureau endeavored to market the property through special authorized real estate agents. This method was successful in a fair measure, and the city was able to market a large number of its best holdings.

About five years ago the bureau made it possible for any licensed real estate broker to sell city-owned property, and, considering the small demand for real estate during the past few years, this method was fairly satisfactory.

It was felt, however, that if the city of Portland were to manage its own sales through giving personal attention to this work, the volume of sales might be increased. Therefore, a real estate department was established by the bureau under the direct supervision of the city treasurer, with an experienced real estate sales manager and staff set up to devote their entire time to the matter of sales. . . .

In order to encourage buyers of city-owned property, the city gives the buyer a very liberal contract with a carrying charge of 6 percent. As large a down payment as possible is obtained, however, and no contract is drawn until at least 25 percent of the sale price has been paid. This does not mean that property is not sold for less than a 25 percent down payment, but only when sufficient monthly payments have been made to accumulate 25 percent of the sale price is a contract delivered. These liberal arrangements are an inducement to persons who are in the market for modest-priced lots on which they may build modest-priced homes. The contracts are drawn for varying periods of time. Most of them are payable in two or three years and seldom is one drawn for a longer period than five years. The length of time allowed a purchaser to pay for a piece of property is governed largely by the amount of the purchase price. . . .

The result of the activity on the part of the city of Portland in disposing of this property shows itself in many ways. It is taking non-producing property and placing it back on the assessment rolls, thereby increasing the taxable income of the city and further reducing property taxes. Inasmuch as it is estimated that 80 percent of the property thus sold is improved, the new wealth created is considerable. Millions of dollars are expended in building materials, plumbing and electrical fixtures, paint, electrical appliances, water, gas and electricity consumption, all of which means additional jobs and positions created for Portland citizens. . . .

During the calendar year 1939 a total of 559 lots were sold by the city real estate department for a total of $122,300. From January 1 to May 15, 1940, lot sales totalled 509, and the sales prices $97,925.

Statement by L. Deming Tilton, Administrative Officer, California State Planning Board

(On May 24, 1940, the California legislature enacted a law, signed by the governor and recorded as Chapter 47 of the Statutes of the Special Session of 1940, which for the first time establishes in that State a carefully formulated plan for reducing tax delinquency and handling tax-deeded land. This legislation, although Mr. Tilton's letter modestly refrains from saying so, represents a real achievement for the California State Planning Board; for the complications of the previous law under which California dealt with tax-abandoned land were emphasized, and proposals on which the new legislation was largely based were presented, in a comprehensive report of the California State Planning Board, published in 1938.)

From an article entitled "A New Approach to Tax Delinquency" by William G. Smith, in *The American City* for June, 1940, compiled from data furnished by Mr. Tilton, the following paragraphs are quoted:

"This law among other things provides a three-member Land Classification Commission to classify all tax-deeded land in the State. . . .

"The distribution of this land indicates that 19 counties out of the 58 in the State have approximately three-fourths of the tax-deeded land, or 2,655,088 acres. Twenty-four cities have over 1,000 lots tax-deeded to the State, but only three, San Diego with 31,895, Los Angeles with 25,307, and Fresno with 10,128, have over 5,000 lots and constitute the main urban problems. . . .

"The commission classified land into three categories: (1) suited for private ownership and to be sold for that purpose as soon as possible; (2) suited for public ownership; (3)

waste land. Any public agency can request that certain parcels be classified for public ownership. . . .

"The commission may rent all land until it has been classified or, following classification, until its disposal. All classifications, prior to disposal, are subject to reclassification. The income from these rentals will serve to meet the administrative expenses of the commission. Whenever waste land is found to be rehabilitated sufficiently to justify its reclassification as either private or public use land, the commission makes this classification. This waste land is analyzed and suggestions for its rehabilitation are made to the appropriate public agencies. It may be rented during the rehabilitation process.

"The right of redemption, which has served to cloud tax-delinquency deeds, is clearly stated. Beyond a period of five years' delinquencies, during which certain notices and warnings are issued, the right of redemption automatically ceases and the property becomes tax-deeded to the State. Adequate and liberal repayment procedures protect the delinquent holder, enabling him to redeem his property before the expiration of the five-year period."

Statement by L. A. Henry, Engineer-Director, Arkansas State Planning Board

(Act No. 331 of the Arkansas Acts of 1939, commonly referred to as the State Land Policy Act, establishes a policy for the handling of tax-reverted lands and other state-owned lands in Arkansas. Mr. Henry sends me an article on "The New State Land Policy," by C. O. Brannon, Assistant Director of Research of the Arkansas Agricultural Experiment Station, as published in *The Arkansas Farmer* for June 1939. From this article the following paragraphs are quoted.)

"The land is to be inspected and classified to determine whether it is suitable for private ownership or whether it should be retained by the State, and also to determine, in case it is found suitable for private ownership, whether it should be set aside as homestead land for settlement by farmers or whether it should be sold for other purposes. If it is classified as homestead land, it is donated by the State to settlers. If it is classified as non-homestead land, it is then subject to sale at its appraised value. If the land is not suitable for homestead or sale to private individuals, it may be allocated to state agencies, subject to their consent, for state forests, state parks, or other public purposes. . . .

"All state land which is not suitable for homestead purposes, and which is not considered suitable for continued state ownership, may be sold to the highest bidder.

"Previously, any land in the State up to 160 acres could be donated for homestead purposes, irrespective of whether the tract was large enough or productive enough to support a farm family. The result has been that misled farmers taking donated land, would find the land unsuitable for farming, and allow it again to forfeit for taxes. Similarly, the land could be sold for a dollar per acre, even though the land was worth much more than that. It has been common practice, also, where state land had marketable timber, for investors to puchase the land at a dollar per acre, cut the timber immediately, and then allow the land again to forfeit for taxes. Whether the land was retained by the purchaser or exploited and returned to the State, the state government has been losing large amounts of wealth and revenue because of the lack of a better method of handling state land.

"The administration continues under the authority of the commissioner of state lands. The classification of lands, however, is the responsibility of the land use committee of the state planning board. The state land commissioner may call upon this committee, and upon other state and federal agencies whose regular functions require an understanding of land qualities and land classification, for assistance in inspection, classification and appraisal."

Statement by A. B. Horwitz, City Planning Engineer of Duluth, Minnesota

The Minnesota laws provide that when a parcel of land has against it unpaid taxes for five years, the county board shall serve sixty days' notice of pending forfeiture. The county auditor may serve one year's notice at the end of the fourth year. If the owner fails to redeem within the time specified, title reverts to the State, which holds it in trust for the several taxing units. . . .

Chapter 328 of the Laws of Minnesota for 1939 provides that upon the forfeiture of land to the State for non-payment of taxes, the county board shall classify such land as "conservation" or "non-conservation." Parcels classified as "conservation" are held by the State and are under the supervision of the county board. Parcels classified as "non-

conservation" are offered for sale at prices not less than the minimum fixed by the county board *for purposes of such sale.* This same chapter provides "that if any such lands are located within the boundaries of any organized town or incorporated municipality, the classification or reclassification shall first be approved by the town board of such town, or the governing body of such municipality."

The state law provides that land "classification shall be made with consideration, among other things, to the present use of adjacent land, the productivity of the soil, the character of forest or other growth, accessibility of lands to established roads, schools, and other public services, and their peculiar suitability or desirability for particular uses. Such classification, furthermore, shall aim: to encourage and foster a mode of land utilization that will facilitate the economical and adequate provision of transportation, roads, water supply, drainage, sanitation, education, and recreation; to facilitate reduction of governmental expenditures; to conserve and develop natural resources; and to foster and develop agriculture and other industries in the districts and places best suited thereto." In other words, any properties which, judged by the standards here enumerated, should be held in public ownership, are to be classified as "conservation lands" and withheld from sale to private owners. Conservation land may be sold, however, to a governmental subdivision, which subdivision must pay the amount set by the county board.

The county board may lease, for periods not to exceed one year, tax-forfeited lands classified as "conservation" or as "non-conservation," and may sell products, such as hay stumpage or mature timber. County may demolish any buildings or structures upon such lands.

Desirable amendments to the state law include:

1. A provision to permit the exchange of tax-forfeited parcels for privately-owned parcels, to make possible the consolidation or enlargement of existing publicly-owned areas and the consolidation of tax-forfeited areas for the vacation of premature plats and for the best disposition and use.

2. A provision to permit the planting of trees in large units of tax-forfeited areas. Planting may be possible through the CCC program. Such planting of large areas not needed for immediate use is likely to prove advantageous, regardless of the future disposition of the land.

3. A provision to permit municipalities to obtain title to land needed for permanent public use, without payment for same.

4. A provision to permit municipalities to make needed temporary use of such land in cases in which the municipality does not deem it desirable to take title.

In the city of Duluth there are approximately 85,000 parcels which are taxable. Of this number, some 25,000 parcels reverted to the State in 1939, about 15,000 parcels will revert in 1940, and about 10,000 parcels are likely to revert during the succeeding two or three years. Thus, approximately 50,000 parcels, out of the total of 85,000 parcels, will be held by the State. Even with unrestricted sale of all of these 50,000 parcels, it is unlikely that more than 5,000 to 10,000 parcels will be bought for private use. This is due to the fact that Duluth, a city of 100,000 population, has within its corporate limits sufficient land for a population of perhaps 300,000, much of which land is not suited for agriculture.

Our problem is to restrict the sale of tax-forfeited lands to areas which will not result in uneconomical extension of public services.

Suggested disposition of tax-forfeited land. We recommend:

1. The blocking out of large unsettled areas against sale to private owners, and the consolidation of such areas through exchange of lands; also, wherever suitable, the forestation or reforestation of these areas. (To constitute a public land reserve.)

2. The establishment of suitable permanent municipal forests.

3. The reservation of adequate park strips along major highways for the following purposes: traffic safety; highway beautification; the prevention of billboards and other disfiguring uses along the highways; the prevention of uneconomical strip development.

4. The vacation of premature subdivisions.

5. Reservation of land required in the master plan for large parks, playgrounds, street extensions, and other public uses.

6. The rounding out of existing public areas through the reservation of tax-forfeited parcels and through the exchange of tax-forfeited parcels for privately-owned parcels.

There is also much to be said for the desirability of bringing into public ownership land not needed for private use or which is not economical for private development.

Statement by Howard M. Hall, Assistant County Attorney, Des Moines, Iowa

Under a statute, enacted in 1935, the county purchases and disposes of tax-delinquent property (now Sections 7255.1 and 10260.4 of the 1939 Code of Iowa). Approximately 95 percent of all properties sold under this law are vacant lots located in the city of Des Moines. Property sold by the Polk County Real Estate Department on which purchase price was collected in 1939 totaled 694 parcels at an aggregate sales price of $66,881—$6,465 in excess of general tax, interest, costs and penalties. During the same year permits issued for construction on vacant lots sold by the county numbered 186, with a combined building value of $553,000.

After acquiring a tax title to property, the first matter we determine is whether or not such property can be put to any public use either in the form of parkways, parks, public building sites, extension of streets and alleys and highways, or for any other public purpose. If such property can be converted to public use, we do so by conveying the same to the taxing body which has supervision of that particular branch of our governmental affairs.

For examples: We acquired a large greenhouse which we conveyed to the city of Des Moines and which is now being used by the city as its municipal greenhouse for the growing of all flowers for city parks. We conveyed to the city a large tract in the center of Des Moines with a natural lake which has been converted and is now known as a municipal park and will be developed as one of the finest parks in Des Moines. We have followed the Bartholomew plan of developing parkways throughout Des Moines and have conveyed hundreds of lots to the city in carrying out a parkway program. We conveyed sites to our hospital trustees for an additional hospital site together with an extensive expanding program of their hospital grounds.

Many street developments have been effected by conveyances of property to the city which avoided the necessity of condemning private property.

We term our scavenger tax sale law, wherein the county acquires title for the use and benefit of the other taxing bodies, as a public bidder law. One of the main purposes of the enactment of the law was to stop the vicious practice of conspiracy of various persons to buy each other's property at tax sale for a nominal figure and take tax deeds and in that fashion cut out the revenue that came from general taxes. Also the good faith purchase of property at the scavenger tax sales was defeating the general taxes spread against the properties.

The public bidder law also encourages taxpayers to pay their taxes before they become delinquent and needless to say, private buyers are now compelled to bid a sum equal to the sum of general taxes, interest, costs and penalties before they can become the bidder at the tax sale.

We have sold many of the cheaper lots to people of very modest means who might otherwise be unable to afford a building program. By that I mean we have sold many vacant lots for $50 on which the purchaser has built a modest home, thus becoming a property owner and a much better citizen. . . .

We have at all times been fair with the former owners and former mortgage holders and any other lienholders, in that after acquiring tax deeds to our properties we in turn contact the former owners and any lienholders that we may find asking that they repurchase this property from the county for the exact amount of the general taxes, interest, costs and penalties. We have in this manner helped save the equities which hundreds of people have had in their properties, more particularly those holding mortgages, not knowing that the general tax on the real estate had not been paid. . . .

Although we are proud of the record which has been made there are many things that are still far from perfect. One chief difficulty after acquiring tax deeds is to obtain a merchantable title. Because our courts have been so prone to set aside tax deeds, lawyers examining titles based on tax deeds have required actions to be brought and a confirmation of the tax title by our courts, so that a quit-claim deed be obtained from the former owner before the title can be approved. This has necessitated much work and considerable delay in perfecting these titles.

Statement by Charles B. Bennett, City Planner and Arthur M. Werba, Supervisor of the Division of Tax Enforcement, Milwaukee, Wisconsin

The city of Milwaukee so far has acquired some 3,000 vacant lots through tax deed action. Fortunately, the laws of Wisconsin are simple and effective. Under our state laws

current unpaid taxes are sold immediately. The sale is evidenced by the issuance of a tax certificate which becomes eligible for tax deed action after a lapse of five years (provided it is not redeemed in the intervening time).

The disposal of tax-deed-acquired lots is likewise regulated by simple methods prescribed by common council resolution. After completion of the action to quiet title the city real estate agent takes possession of the lots. Before the agent, who is an employee of the city planning commission, places any foreclosed tax-delinquent properties on the 'For Sale' list, they are referred to the city planner so that he may check the question of whether or not any part or all of the parcel involved is needed for any present or possible future public use. All such parcels are referred to the unofficial master plan before a determination is made. We have found this system very effective in retaining many parcels of land needed by the city for future street widenings, parks, and playgrounds.

The city of Milwaukee has 30,000 vacant lots within its limits, and 34,000 vacant lots just beyond the limits—a supply, based on normal needs, that would last for the next fifty years to come.

In selling foreclosed tax-delinquent properties the city is maintaining a fair price on them, rather than resorting to the auction method—taking what we could get thereby, which procedure would not only demoralize the local real estate market but our tax-assessments as well. Under the auction method most of these lots would find their way into the hands of speculators who, if they could not immediately turn them over at a profit, would let tax payments slide and the city would again have to go through the process of tax foreclosure. Altogether, we think we have devised a very efficient system for handling foreclosed properties here in Milwaukee.

Statement by Clarence W. Lock, Executive Secretary, Michigan State Land Board

Under the State Land Board Act of Michigan (No. 155 of the Public Acts of 1937, as amended in 1939), now under attack in the state supreme court, Mr. Lock reports that "the State acquired title, on November 3, 1939, to some 520,000 parcels because of the failure to redeem said lands from the 1938 tax sale. On February 13, 1940, the State opened a sale of these lands in each county under the jurisdiction of the state land office board. Counties in the northern part of the State do not come under the supervision of the board, but lands in those counties are administered by the lands division of the department of conservation.

"Up to May, 1940, the board has completed its offering of these properties in all except four of the counties under their control, and in these counties the sale is still continuing and will undoubtedly continue until this fall. Wayne County, for instance, had 251,000 properties involved, and we find that we are unable to offer more than 1,200 or 1,500 parcels daily. We have now offered 160,000 parcels, out of which 60,745 have been sold for a total amount of $4,593,633. We have, likewise, collected, since last November, $244,507 in rentals on properties which have reverted to the State."

Statement by H. G. Crow, City Manager, St. Joseph, Michigan

In regard to the State Land Board Act, I know very little about how satisfactorily the law is working in the northern part of the State, and all of my comments and criticisms will be with reference to the law as it applies to the southern part of the State. I was a member of the Michigan Municipal League's committee when this law was enacted, and later in 1939 when we attempted to have certain amendments enacted which we thought would make the law more workable. Some changes we were able to obtain, and some we were unable to prevail upon the legislative committee to consider.

The law provides that in May of each year any uncollected taxes of two years' delinquency are sold. If there are no bidders on these taxes and they are still delinquent eighteen months after that date, the State takes title to the property and in the following February the property is sold at auction to the highest bidder. Any party in interest (party in interest defined as owner of record, mortgage holder, bond holder, or any other interested party) may within thirty days after date of sale elect to meet the highest bid and take the property by paying that amount. He may also elect to pay the amount over a period not to exceed ten years, with interest at 6 percent on the unpaid balance. The property must be sold for a minimum of 25 percent of the assessed valuation of the year preceding the vesting of title in the State.

The law had been well publicized and there was a good deal of interest in it. As many buyers as could be expected were attracted to the sales. However, human nature is to get what you want at as low a price as possible. The bidding was usually as follows: If an outside bidder of interest were present and the original owner were present, the original owner would make a minimum bid, and the outsider would make a small raising bid, which ended the bidding. The party in interest then within a thirty day limit would meet the bid and take the property. If the outside party made the first bid, and usually the minimum bid, the interested party would not bid but would again meet the bid within thirty days. This tended to hold the bidding down, as oftentimes the outside bidders would have bid the sale price up much nearer the delinquent taxes, if there had been competition. The only time there was competitive bidding was when two or more outside parties bid in competition.

My personal recommendations would be that the law should require the party in interest to compete in the bidding and that any recognition of his prior interest be in method of payment. I feel that much more would be realized if this were the law.

In small cities where home-building activities are more or less periodic and much of the subdividing is done by owners of small tracts of vacant property, with no actual real estate experience, the tendency is to over-subdivide during active periods and hold the price of lots so high as to kill the building activity. . . .

St. Joseph developed a plan which has, we feel, worked exceptionally well, although it might not be applicable to many other communities. There was a crying need for construction of homes. The factories had gradually increased their employment without any appreciable increase in the construction of homes. The owners of lots were inexperienced subdividers who originally, in their greed for profits, had placed too high a price on their lots. In the spring of 1937, there was considerable activity in home construction. Again the owners of lots began to increase the price of their property until by midsummer this increase, with the increased prices asked by contractors, put a stop again to home building.

A group of representative, public-spirited business and professional men observing this, incorporated what was known as the St. Joseph Housing Corporation, a non-profit corporation whose purpose was to aid and encourage the construction of homes in St. Joseph. They obtained a fund of $10,000 from an old development company and this was their working capital. Their thought at the time was to buy lots, construct homes in more or less moderate mass production, and sell them at cost. They bought a group of lots and built ten homes, but did not have any great success in selling them.

At the same time that the housing corporation was building its houses, the city made a study which showed over 600 parcels of land with delinquent taxes and assessments. A campaign was started to collect as much of these as possible. Notices were sent to all owners and over 250 parcels of land were cleared of delinquencies, However, this left approximately 350 parcels with delinquencies in excess of their actual value. A plan was worked out and offered to the owners of lots which provided that they deed the lots to the city, free and unencumbered except for taxes, the city then to pay up the taxes and assessments in full, with a contract to the owner providing that the city pay them 20 percent of the selling price if the property was sold before May 1, 1941. If not sold by that time, the city would have no further obligation to pay the owner. In all, 197 parcels of land were acquired by the city and a total payment of accumulated taxes, assessments, interest and penalty of $76,371. However, of this amount $72,173 represented the city's share of the payments, most of which were assessments for improvements. This left an additional investment of the city of $4,198, or approximately $21 per lot. This was in the spring of 1938, and to date there have been 35 lots sold for $7200, on which are 35 new homes either completed or under construction. Home construction on privately-owned lots was stimulated. Also, there is a tract of 19 lots being used for playground purposes.

It is true that the city is in the real estate business; but it really started in that business between 1920 and 1930 when it went into partnership with the subdivider, the subdivider providing the land and the city providing the municipal improvements. When the depression hit in 1929, it ended the sale of vacant lots and many of the lots sold on contract came back to the subdividers. In the majority of cases, the subdivider had no funds to pay up the assessments as they came due and these accumulated against the property, with the added interest and penalties. It is true in St. Joseph that subdividers have practically all faded out of the picture and there is no objection from the broker, who makes his money by selling property on a commission. The commission on a vacant lot represents little in comparison to his commission on the sale of an improved house and lot. The stimulant to building, however, has also stimulated the activity in sale of improved property. Often-

times, the new builder is the seller of a home that did not fit his needs. Of course, the city's real estate activity has the backing of the retail merchants in that it gives them more customers, and the backing of the factories, because it provides homes for their employees. It stabilizes the price of vacant property and discourages the subdividing of additional vacant property into lots until such time as building has absorbed the lots already laid out and now owned by the city.

In the tax sale for February, 1940, 150 parcels were offered. Before the sale, the industries financed the housing corporation in order that they could bid on vacant lot property. The schedule of bid prices was set up on all lots comparable with what it was thought the property should bring and what it was thought the builder of a home should pay. The housing corporation bid in 90 parcels of land, mostly lots; 50 of these were redeemed by the original owners, leaving 44 lots, which the corporation proposes to sell for immediate building at the price for which it obtained the lots.

Statement by John T. Howard, Technical Officer, Regional Association of Cleveland, Ohio

A law passed by the Ohio Legislature May 2, 1939, provides a method of public acquisition of tax-delinquent land somewhat superior to earlier Ohio procedures. It was designed for use in rural areas, especially forest or sub-marginal farm, but since "recreation" is one of the purposes of acquisition enumerated, it may also prove applicable to urban land. Its constitutionality has not yet been tested. Its advantages are: relative speed—land four years delinquent requires only sixty-day advertising and one sale, whence unless it brings the full amount due it comes immediately into full state ownership; local governments may buy or lease from the state agency. Its disadvantages are: uses limited to "forest reserve, game reserve, recreation or other conservation purposes;" could not be used to establish a public land reserve or for resubdivision and resale to private owners; full amount due must be paid, either when acquired or out of income from forestry.

Under older Ohio laws still in force, public agencies (local or other) can acquire clear title to tax-delinquent land for other purposes only by bidding it in at a public sale. Moreover, the process of advertising required by law is so long and expensive that only a small proportion of tax-delinquent land comes up for sale. The result is that such auctioned delinquent land as is suitable for public use is usually acquired by private speculators.

One suburb of Cleveland—Bedford—and at least one other Ohio city have nevertheless acquired a little land under this procedure for nominal amounts, with a view to resubdivision and resale or public use. The land is mainly in vacant lots where the sum of regular taxes and special assessments far exceeds the valuation. This method needs further exploration, and the law probably needs further amendment.

A chief disadvantage of this method is that local public agencies are on exactly the same level as private buyers, principally speculators, in acquiring tax-delinquent land. The State itself, even after tax foreclosure, has no clear title and cannot use the land; it must sell, and until the land is sold it is subject to redemption by the former owner.

In 1938 Ernest J. Bohn, in a letter to a committee on tax foreclosures of the Cleveland Bar Association, outlined a policy revising the Ohio law. This policy is very much in line with a recommendation made by the California State Planning Board in its 1939 report on *Tax Delinquent Land in California*. The most important features of it are: the sharp termination of the original owner's rights in the land, after a reasonable period for redemption; and the introduction of a planning agency to determine the disposition of the forfeited property, for immediate public use, for eventual public use, for immediate lease or resale to private owners, for resubdivision, lease or resale, for rehabilitation, lease or resale, or for indefinite public reserve.

In Cuyahoga County (roughly coterminous with Greater Cleveland) as of 1939, there were approximately 375,000 parcels of property on the tax rolls. The number "certified delinquent" (one year or more) was: in 1935, 180,000; in 1936, 168,000; in 1937, 154,000; in 1938, 146,000; in 1939, 160,000. Of this last number about three-fourths were unimproved and one-fourth improved parcels. Though the trend from the depths of the depression is downward, from 58.2 percent of all parcels delinquent in 1934 to 42.7 percent in 1939, the proportion is still alarming. The number of unimproved parcels delinquent is especially significant. In two large suburbs of Cleveland, 80 percent of all parcels is delinquent. They are overwhelmingly unimproved. This is the result of oversubdivision.

There is, of course, much less land that has been delinquent long enough to be considered for public seizure and disposal. At the last sale of forfeited lands, about 3,400 parcels

were put up for auction—only one percent of the total. These had all been delinquent at least four years. We know that probably twenty times as many parcels could have been put up had the expensive forfeiture proceedings been carried through. (In 1936, 111,000 out of 168,000 delinquent parcels had been delinquent 4 years or more.)

If foreclosure and disposal proceedings were simplified and rationalized, the Cleveland region would be able to take over and plan the disposal of between a quarter and a third of its parcels of land, largely unimproved property. (This does not mean a quarter of its area, nor of its assessed valuation, of course.)

Present practice in trying to restore such land to a taxpaying status has centered around making it easier for the owner to redeem and hold the land, through the Whittemore law which permits back taxes to be paid in ten annual installments, and through the respreading of special assessment taxes. This often just prolongs an agony of inevitably fatal ending. Needed improvements of method in bringing such land into public or productive private use have been mentioned above.

Statement by Sergei N. Grimm, Executive Director, Syracuse (N. Y.) Housing Authority

In a study of tax-delinquent parcels in Syracuse which we undertook in 1937 in correlation with the state-wide study carried out under the direction of Philip H. Cornick, we were impressed with the phenomena of simultaneous stagnation of public investment on the outskirts (in the form of delinquent taxes) and of private investment in the obsolete areas in the central part of our city.

Our study of housing demand indicated a general tendency toward positive demand in the outskirts and negative demand in blighted areas. It occurred to us that the situation could be improved by a barter arrangement, the result of which would be some transfer of private investment to the outskirts and of public investment to the heart of the city where the need for public land uses is most pressing.

We found, however, that our tax-foreclosure procedure needed improvement and the facilities of handling foreclosures had to be provided. In 1939 the New York State Tax Foreclosure Law was amended. In Syracuse a local real estate commission was established, which is now busy foreclosing parcels in the central part of the city that can be used immediately for public purposes. Simultaneously the City Planning Commission is proceeding with the classification of delinquent lots on the outskirts as to the best possible future use. After we determine what parcels should be reserved for public use, and what parcels are suitable for residential use, we should be able to try out the barter arrangement.

Incidentally, partly in connection with the study of vacant lands on the outskirts and partly in connection with the general work on the preparation of the city plan, we are considering a form of land use which is new to us in Syracuse—general reserve areas partly controlled by the city as a municipal reserve and partly privately-owned and used for agriculture and similar purposes, all of these areas to be a part of general system of principal open spaces.

Improvements in Foreclosure Procedure in New York State

Under Article 7-A of the Tax Law of New York State, which became effective October 1, 1939, any number of foreclosure actions may be consolidated in one proceeding. Its terms are analyzed quite fully by George Xanthaky, Attorney, of Long Beach, N. Y., in Chapter XIX of *Property Taxes*, published in 1940 by the Tax Policy League of New York.

Mr. Xanthaky explains that the new law is the outcome of a study conducted by a joint committee of the New York State Conference of Mayors, the New York State Bar Association, and the State Tax Commission.

At the outset the committee determined that it must adjust the law to the realities of the case. "The necessity of money for the support of government" was the primary problem. The committee proceeded on the premise that there is a legal and practical distinction between a private and municipal tax lien buyer. One is a voluntary investor for profit. The other is an involuntary bidder compelled by law to protect its own taxes. One buys the cream, the other is left with the skimmed milk-liens on vacant, unimproved submarginal land. The mortgage foreclosure remedy, costing at least $125 per action, might be a fair remedy for the private lienor; but it was far too expensive for a municipal lienor.

"It was felt that a remedy must be devised for municipalities which would eliminate the necessity of title searches, personal service, referees' fees and huge advertising costs;

that an action *in rem*, directed against the land, as distinguished from the owner of the land, and in which there would be no personal judgment, was the solution to the problem."

Under Title 1 of the act, a tax lien is defined as "any unpaid tax, assessment or other legal charge, which is a lien on real property whether or not the same be evidenced by a 'transfer of tax lien,' a 'tax sale certificate,' a 'tax transcript,' a 'certificate of tax sale,' or any other written instrument." This definition is sufficiently broad to cover any debt or charge owed to the municipality regardless of the name or technical description thereof used in any local or general tax statute.

The municipality initiates the action by causing the tax collector to prepare a list of all property on which there are unpaid tax liens at least four years old. The filing of the list, duly verified, in the office of the county clerk has the same force as would the filing of separate notices and complaints under the old procedure. The new action is simple, summary, and inexpensive.

Procedure under Article 7-A by counties and municipalities is a matter of local option. A letter from H. R. Enslow, Assistant Director of Local Assessments, of the New York State Department of Taxation and Finance, reports that as of April 1940 eight counties and nine municipalities had adopted the Article, and at least fourteen other municipalities were planning to do so.

Statement by Charles L. Curran, Attorney in Charge, Bureau of Tax Lien Liquidation, Yonkers, N. Y.

(In May 1936, *The American City* published an article headed "Tax Lien Foreclosure Program Aids City Planning in Yonkers." In it Theodore T. McCrosky and Charles L. Curran, then Planning Director and Assistant Corporation Counsel, respectively of Yonkers, explained a program then being developed for restoring the potential usefulness of tax-abandoned properties through foreclosure by the city. Special consideration was given to parcels that could be used to good advantage for public purposes and to parcels that might be resold to private parties able to pay taxes. The article listed nine important acquisitions for public use already accomplished.

In reply to an inquiry as to subsequent progress, Mr. Curran writes under date of June 1, 1940).

Since the publication of the article in May 1936, many additional properties have been acquired as a result of the program of liquidating tax liens as follows:

A plot consisting of twenty-three acres upon which it has been tentatively planned to erect a senior high school, a junior high school and a grammar school which will have adequate playground recreation facilities attached. The section in which this property is located is growing so rapidly that the time is drawing very near when the erection of these schools will be necessary.

A second school site in a section which is growing quite rapidly and in which the school facilities at this time are not adequate.

A garage with entrances from two streets at different levels, which are to be used for storage of trucks and warehouse purposes.

A tract of land upon which has been developed a baseball field and adjacent to which another parcel of land now in process of acquisition will be available shortly for recreational purposes.

A plot which is now used for a picnic ground by private organizations at a moderate rental, and which is at all times available for a low-cost housing development.

A substantial addition to an existing part.

A parcel upon which has been erected tennis courts and another parcel in the same vicinity which will be available for a branch library whenever it is deemed necessary to establish one.

Several small parcels adjacent to school play yards which were added to play yards, thus increasing the recreational facilities of the school.

Several other parcels of land were acquired and were subsequently sold to private purchasers, the city, however, reserving to itself strips of land adjacent to the street which can be used in the future for widening purposes and the acquisition of which will substantially reduce the ultimate cost of the widening.

Statement by Hugh R. Pomeroy, Director, Virginia State Planning Board

In 1930 it was enacted by the Virginia legislature that when real estate sold for delinquent taxes and purchased by the State is not redeemed by the previous owner, his

heirs or assigns, or some person having the right to charge the same with a debt, within two years from the date of the purchase, the real estate shall not be subject to further sale if the State Conservation Commission through the proper procedure applies for its use as forest land. After proper procedure the State may use such land for forest purposes, with the provision that one-fourth of the gross returns from such use shall be paid annually to the counties in which the lands lie.

In 1938 the Code was amended to provide that when on public sale, "and no person bids the amount chargeable thereon," tax-delinquent land may be purchased "for the benefit of the State and county, city, or town, respectively."

Statement by H. C. Loeffler, Secretary, Boston Municipal Research Bureau

As of May 1940, the city of Boston has about 2,400 parcels which have been put through the land court and on which it holds absolute title. Of these slightly over 300 are improved; that is, they have structures standing on them of one sort or another. The estimated assessed valuation of all these properties is $4,000,000. On April 30 there was $1,302,754 owing the city in back taxes, interest, and costs.

During 1939 the city sold 136 parcels for $106,405. The assessed valuation of these pieces was $298,380 and $118,406 was owing the city on them. In 1939 the city collected $31,726 from rentals and at the close of the year there were 156 tenants. The Real Division of the Public Buildings Department still handles these problems and it was recently turned into a revenue department. Its expenses, therefore, are met from departmental earnings.

Quotation from an article by Mr. Loeffler and his associate, Richard A. Atkins, published in the national edition of the "Real Estate Record," of New York, for October 1, 1938

"It is a fixed principle with the law department to encourage and facilitate redemptions. Boston normally holds tax sales 18 to 20 months after the date when taxes are due. It may not exercise its right of possession until two years after deed is taken. . . .

"At the discretion of the city treasurer, the redemption period may be extended for a third year, providing arrangement is made for payment in the intervening 12 months. Often the threat of foreclosure yields results where less formidable measures do not carry conviction. The law department receives overtures up to the last moment.

"After the land court determines the amounts due the city, another breathing spell of perhaps three months, as determined by the court, follows. Failing redemption, the court is petitioned to enter a decree of foreclosure, which is the equivalent of a clear title. At this point the law department's work is done, and the chief problem from there is one of real estate management. . . .

"A 1938 statute . . . generally applicable to all cities and towns, vests large powers over tax title properties in the mayor or a custodian named by him. Under able administration it should make for greater flexibility. On the other hand it opens the door to unrestrained abuse by bad administration. . . .

"The Real Estate Division [of the city of Boston] has made a start toward using tax title properties for municipal purposes. An ordinance allows the transfer of possession to another city department when the mayor and council approve. . . .

"The Real Estate Division has adopted the policy of withholding from sale parcels of potential use; specifically, pieces adjoining schools, fire stations, and other city property. A new development is the sequestering of parcels in areas of possible value as housing sites. Given enough such properties, they might furnish part of the local contribution to housing projects."

Introduction

EDITOR'S NOTE.—At the last dinner session of the National Conference on State Parks, held in Illinois and Indiana in May of 1940, Dean Stanley Coulter and Colonel Richard Lieber spoke without notes. John G. Coulter, at our request, has sent us a brief report of the session which we are using as an introduction to the State-Park section of the ANNUAL. Most of the other papers in this section were presented at that Conference. The delegates met at Starved Rock State Park in Illinois, visited New Salem State Park, which is a restoration of the pioneer town in which Abraham Lincoln lived and worked, then proceeded to Indiana where Turkey Run, McCormick's Creek and Spring Mill State Parks were visited. Arrangements were in charge of Carter Jenkins, Chief Engineer, Division of Waterways, for Illinois, and Charles A. De Turk, Director, State Parks, Lands and Waters, for Indiana.

DEAN Stanley Coulter was eighty-seven on the 2d of June, 1940. He spoke at Spring Mill less than three weeks before that day, and when he spoke he proved that the vigor and beauty of his words and the courage of his unconquerable optimism had not been lessened by the passage of so many years. The ovation that he received was memorable in the annals of the Conference. He made us for a time forget the fears that contemporary events have caused, and revealed his vision of what a brighter future may hold in store if we can share his courage and keep faith with the principles which determine the nature of lives like his.

Quiet restraint as well as poetic eloquence characterized Colonel Lieber's vivid account of the pioneers who built the village called Spring Mill. He made the slow caravans guided by those men of iron pass before our eyes as they fought their way through the rugged wilderness of Indiana nearly a century and a half ago. He called them by name and brought them to life.

Then Stanley Coulter spoke, and began by suggesting the fewness of the years that had separated him from those pioneers. When he came to Indiana from China in 1855, Indiana was but little less a wilderness than it had been in the days when the Bullitts built Spring Mill. What a difference today!

The Dean spoke of his joy in meeting again with so many of those with whom he had worked through the years, worked with them to the end of achieving, of safeguarding, and of perfecting the great system of the people's parks, now become a national treasure of inestimable value whose guardianship has been placed in their hands.

"You," the Dean said, "you to whose care the great parks have been entrusted, are yourselves pioneers. You have worked for the fulfilment of your vision of the possibilities of these areas in the enrichment of human life, and of their function, not only in the conservation of natural resources and of scenic beauty, but also as a factor in the development of a citizenship that shall 'see visions and dream dreams' of a better and a happier future. For in those parks, with their inescapable implications of divine order, I see that which may inspire men to more effective

fulfilment of the truth, the truth expressed in the familiar but so often forgotten words, 'the fatherhood of God and the brotherhood of man.' "

"So again I say that you are pioneers, pioneers who may be leaders toward a better day, and I charge you to be faithful in the future as in the past to your great privilege of responsibility and of opportunity."

The Dean closed with those anonymous lines which, perhaps more than any others, carry his philosophy into its practical application.

Look thou well to this day,
For it is life,
The very life of life.
In it lie all the varieties and experiences
Of your existence,
The bliss of growth,
The glory of action,
The splendor of beauty.

Every yesterday is already a dream,
And tomorrow is but a vision,
But this day well lived
Makes every yesterday a dream of happiness
And every tomorrow a vision of hope.

Therefore look thou well to this day.

The Purpose of the National Conference on State Parks

RICHARD LIEBER, Indianapolis, Ind., Chairman of the Board, National Conference on State Parks

THE Program Committee has asked me to speak to you on the subject "The Purpose of the National Conference on State Parks." But, my fellow Park men, you know this purpose as well as I do for is it not:

1. To meet each year that we may consult and discuss with one another the aims and policies of maintaining the old and creating new state parks.
2. To regain confidence and derive inspiration by listening to those who have succeeded in putting in practice in their respective States the policies set forth by that small group of men, who under the leadership of Stephen Mather, founded the National Conference on State Parks in Des Moines, Iowa, in the year 1921.
3. To give friendly advice and support to those among us who have been hampered either by an unfavorable set-up or by political interference, by lack of funds, or even by their inability to protect the very large park assets created by Federal aid.

Yet, perhaps it was the idea of these good friends of the Program Committee that having participated in all but one of these meetings, and having worked on the job all of this time and even long before, I might become eligible to the ranks of the soothsayers and prophets. If that were the intent I should have to point out that soothsayers and

prophets have been abolished long ago, observing with Eliphaz, the Temanite, in the book of Job, "Should a wise man utter vain knowledge, and fill his belly with the east wind?"

I have no knowledge, vain or otherwise, which in like manner is not shared by every other earnest Park man and student of the national scene. We differ sometimes among ourselves in matters of approach or in placing emphasis on this, that or the other constituent part—scenic, social, historic, biologic—yet hoping ultimately to integrate all elements into a serviceable and harmonious whole.

It is good to have this diversity of opinion within our ranks for it keeps the older heads from resting on their laurels; which laurels otherwise for want of attention soon would become herbarium specimens instead of remaining "A plant to wither never, but like a laurell, to grow green forever." (Herrick)

It is likewise of profit to the younger ones as it gives them the much needed chance to graduate from the limited calling of specialists to the commanding one of Park Administrators. We must have more Park Administrators, men of vision, fine balance and capable of making, instead of participating in a payroll. If state parks should fulfill their mission they must be capably and expertly managed.

Times, need I assure you, have changed considerably since Steve Mather, John Barton Payne, Will Welch and a few others of us started the National Conference on State Parks back in 1921.

We had an object. Some of us, being New Englanders, also had a "concern." We felt that the Federal Government alone could never save the glory of American scenery and make it accessible to the people. It was clearly seen that untold hundreds of areas lesser in acreage and perhaps some even of Federal standards within the several States must be preserved for their inherent scenic, historic and social value.

Stephen Mather, in his position as the first Director of the National Park Service, far from fearing competition with the National Park System, realized in his great, envy-free soul that state parks conducted on a high plane would not only supplement the national properties but would vastly increase public appreciation and understanding of the beautiful in nature.

In the course of the years the accuracy of his judgment has been amply borne out when the most reliable estimates of use of park areas in the United States give 16,000,000 visitors for the national parks and between 50,000,000 and 60,000,000 for state parks, not to mention the many hundred millions of visitors for county, metropolitan and municipal parks.

The National Conference on State Parks was to act as a clearing house in park thinking and its objects were set forth "to urge upon our governments, local, county, state and national, the acquisition of land and water areas suitable for recreation, and preservation of wildlife, as

a form of the conservation of our natural resources, until eventually there shall be public parks, forests, and preserves within easy access of all the people of our Nation, and also to encourage the interest of non-governmental agencies and individuals in acquiring, maintaining and dedicating for public use similar areas; and as a means of cementing all park interests into an harmonious whole, to provide for a conference and exchange of ideas by an annual meeting of such interests, and the formation of facilities for the exchange of information and ideas between conferences."

Last year's Conference at Itasca State Park, Minnesota, changed the phraseology under statement of "Object," as follows:

> The object of the Conference is to inform the public through a central clearing house of information, publications, conferences, courses of training in schools and colleges, and by other educational means, of the value of state parks, historic sites, forests and preserves, suitable for recreation, study of natural history and science, preservation of wildlife and conservation of natural scenery, by development within the States of well-balanced state park systems; to the end that every citizen of the United States shall have easy access to state recreation areas and appreciate their value as a recognized form of land-use.

You will observe that from the beginning a vagueness existed, as it does now, in the treatment of forests as recreational areas. The matter at that time was passed over, as it is now, by the forester promising not to cut the timber—right away—and the Park man willing to leave the name "forest," but like the Adirondack and Catskill preserve, keeping it from being used commercially.

It is regretted that we never had funds enough to make a stenographic report of the proceedings of each Conference. An exception is the Third Conference at Turkey Run. In this report we find a map of state parks, especially prepared for us by Rand McNally and Company. In blue color it gives the national monuments and parks, and in red the state parks, with twenty-five States claiming 194 state parks. Checking this list with tabulations made by Beatrice Ward Nelson in 1928 and Raymond H. Torrey in 1926, the number of actual or potential state parks was in the vicinity of 100. If we compare this list with present-day statistics we find that we have 26 national parks, 74 national monuments and 43 other areas, also that 47 States claim 821 areas indiscriminately labeled state parks. Supplementing the above are important county and metropolitan parks.

It would be interesting to know what our successors in another 25 years will say to our present-day claims and show what has happened to the properties by way of growth or demise. On my part I have a feeling that they will do much better criticizing our work than making more correct statements of their own.

Getting together, as we do in this propitious hour, it should be our aim to strengthen our Park philosophy and policy in order the better to carry out our objects. We are chiefly concerned with state parks and

their proper function. On previous occasions I have expressed myself on such subjects as definition of state parks, selection, and management. It would be tedious to go over these subjects again. Nor would anyone's suggestions be of practical value unless the National Park Service, with its large participation in park and recreational work at stake, would proceed with the definition of areas and a tabulation of state action on promises made and performances effected. This could be done with the coöperation of our own and other similarly interested citizens' organizations.

My own thoughts on defining areas are briefly these:

Remember that we deal in two separate values: Parks *and* Recreation. It is still that, and not Recreation in Parks. Keep the promotion of the two separate in their own interest. Parks offer recreation of one kind; recreational centers, another. State parks offer the finest of scenery and are to be preserved in their natural features plus fauna and flora in perpetuity. Recreational centers may be built wherever needed. Between the two stands the State Recreation (not recreational) Park, an area of lesser scenic value but of wider opportunity for sports and play.

State Historic Parks above all must preserve inviolate the atmosphere of their time. Any attempt to introduce extraneous features of play and sport would relegate them to the class of recreational areas.

State Monuments (Memorials). To be judged from case to case by an historian and not by a physical director or any animated play mechanism. Some of these areas commemorating great events or persons or occurring as natural phenomena may, however, be especially attractive for purely physical recreation, others decidedly not. Altogether these matters should be decided by Park men and not by specialists who, though devoted and capable and still believing in "free service," are nevertheless looking for a free boarding house.

As to the tabulation of States, we ought to know where we stand with these States just as much as a bank or a commercial house wants to know from time to time from the debtor for what good reason he should be shown consideration, let alone given increase of credit.

After the States have been duly classed, they can see for themselves the difference between a container and a rat hole. This of course has nothing to do with needed relief but everything with Parks and Recreation. It would be far better to give outright dole than start something in the landscape which if not kept up will surely become an eyesore and a financial loss in the future.

It is obvious that in the prosecution of our state park work we must hold fast to the original conception of its primary purposes. We should be reminded that the secret of all success is constancy of purpose.

Generalization will no longer do, and declaring a given area a state park will not make it one. Nor does it augur well for a sound structure of future park usefulness and stability if we fail to call diverse under-

takings by their proper names. All things in their proper place and therein properly labeled.

It should be clear to us by this time, having watched the extraordinary extension of state areas during the last six years, that state parks, state historic memorials, state forests, regional or local recreational areas and wayside camps serve a purpose all their own. All of these are important parts of the social fabric but to be effective must remain distinguishable parts. All are intimately related to human welfare but in order to render the intended service they must be kept apart so that their functions may fully be realized and not become confused with that of another facility, let alone impose themselves upon some other's primary function.

I appreciate my good fortune to have had the opportunity to follow the Park work done in the Nation. Visiting 45 out of 48 States, a marvelous picture has revealed itself, but after having seen all of that I am glad that it is not possible, even were it desirable, to make a composite picture.

It is obviously out of question within the limited scope of these remarks to go into further detail about what I have seen. So let me say in as few words as possible, in almost Night Letter style, what we are facing to bring the state park issue to a happy conclusion.

For several years I have felt that we should stop expansion and devote ourselves to consolidation of gains. These gains are great, indeed very great, but the safeguarding of that which will live and thrive demands that we eliminate excess growth. By excess I mean the retention of areas which interfere with, or make impossible, the development of others. That will be a major operation, but it is necessary to save, not merely as temporary relief measures, those areas which qualify as state parks because of their scenic and recreational value.

State after State is struggling with this situation. The wiser have already decided upon curtailment, driven to it by scanty appropriations which are barely large enough to carry out part of the program, and which hardly ever cover upkeep and maintenance of structural and nonstructural improvements obtained by them by way of Federal assistance.

If consolidation instead of further expansion was indicated some time ago, how much more so under present ominous international conditions. For it must be plain that the moment CCC or WPA is curtailed, many of the States either will not or cannot continue park work under their own power.

It is fortunate that so far the excellent corps of technicians and scientists of the Branch of Recreational Planning and State Coöperation was able to direct or at least assist in state park work. Without it the States which need this talent but are unable to pay for it would be helpless. I have seen evidence of this all over the country.

I hold in high esteem the administrative and technical field force who,

frequently working against political or private stupidity and cupidity, have yet signally succeeded. I have high praise for the Regional Officers who have the courage to say "No" when "No" must be the answer, but I feel in the last essence that the saving of the whole state park program lies with public enlightenment and assistance. Here, as in any of the higher aspirations, the citizen must assert himself.

Parks are the show windows of Conservation. The conservation of our material resources comes first, for we cannot hope to conserve, protect and elevate our human resources without improving this material basis. Charity in this case, too, begins at home. When we begin to conserve natural resources in their material state, we do so in an attempt to sublimate their quality in order to conserve humanity.

Ours is the stewardship of things not made by the hand of man. We are imbued with a purpose to preserve the natural beauties and advantages of a State in order that succeeding generations may enjoy the blessings thereof. In this undertaking we must include the opportunity for conservation of the health and character of our citizens in order that they may have the right to be well born and develop into sturdy men and women capable of enjoying life, liberty and the pursuit of happiness.

From the trees of the forest we may learn of our shortcomings. We preserve these monarchs of the woods not only as living witnesses of the great bygone, but also to learn from them the secret of healthy growth and development. We regard these stately trees as symbols of the past, as our covenant for the present day and as a promise of the future. The tree is a very token of our institutions. Firmly rooted in material earth, but reaching with its branches into the light, it has endured heat and cold and the storms and changes of ages. It has grown from a slender sapling to a towering giant. Its only change was by natural growth. It has developed from within and thereby gained its strength.

Indeed ours is the stewardship of things not made by the hand of man. Their ever active though intangible force will be reflected in this preservation of old ideals and in our insistence that we still believe in their indestructibility because we hold them to be eternal values.

A Message from the President

H. S. WAGNER, Akron, Ohio, President, National Conference on State Parks

I CANNOT recall exactly when I attended my first Conference meeting. However, it was more than ten years ago, and so it is safe for me to say that for that length of time I have myself expressed the thought that annual meetings were too far apart. I have heard many others who have had that same idea, and yet the twelve months roll around before we know it; and very pleasantly, here we are again for another session. For a part of the group there is always a regional meeting in the

fall; and for the benefit of those who were not at Atlantic City, it seems in order to report that the New Jersey Parks and Recreation Association did a fine job and gave plenty of evidence that there is growing interest and activity in the field of state parks in many of our northeastern States.

I think that I express the sentiment of many Conference members when I say that it is most appropriate for us to meet in Illinois and Indiana this year. Indiana will speak for herself later in the week, with all the dignity that befits her seniority in this work. And as for Illinois, it is very pleasant to open our session here because she gives us evidence of the good effect of state-park-minded neighbors, and because her accomplishments are more recent and offer opportunity for comparison and reflection on the trend of the movement as a whole. For many years this Conference has had the support and coöperation of the members of the staff of our host, the Illinois Department of Public Works and Buildings.

Apparently this is the one place on the program where I am afforded a chance to report to you. This report is brief because it has been "boiled down" until it is the very essence of my year's work as your president.

First of all, it is now quite clear that this Conference can make progress only by increasing its membership. A good deal of time has been spent by the membership committee under Charles Elliott; and the financial report which you will hear a little later will show that, even in the face of a woeful lack of interest on the part of the people we think should join us, this Conference has added many new members. I cannot possibly over-emphasize the absolute necessity of capitalizing those gains and of building upon them to a membership twice the size it is today. I say this because I feel that we should not expect others to support us. I am almost certain that we cannot secure the help of other organizations or subsidies from any of the Foundations—a hope that we had during the past several years, but which is, for the present, futile. As disappointing as that is, it is my feeling that the sterner challenge to do the more difficult job—that of adding more members—is bound to bring about a more stable Conference in the future. I, for one, am sure that we are very rapidly approaching a time when this Conference will be wholly dependent upon the support of the people who are employed in, and interested in, state park work. Up to now a relatively small number of determined people—I do not exactly like the term enthusiasts, for the men and women I am thinking about were more grim than I picture enthusiasts to be—have done the chores and paid the bills. Now it is time to prove that the Conference is worth so much to the people whose livelihoods originate in the parks that those folks will see fit to help themselves by helping the Conference. Sounds kind of blunt, and maybe has to be. Personally, I think that is the situation. Other organizations, very similar to this one, are in the same predicament, and

I am telling no secrets out of school when I ask you to believe that we can depend only on more members if we are to be as effective as we have been in the past.

A word, too, about the training program. The facts are that there has been no short course this spring such as was instituted by Dr. Cox at Syracuse last year. Not that Roberts Mann has not labored to that end, but rather because of the exacting nature of such a program in the eyes of educational institutions. The report of that committee will come up later. So much for my report, which might have been reduced to a sentence, "Get more members, or else!"

These meetings get old friends of state parks together each year and attract new ones into the fraternity. Coming in the spring before the heat of the season really bears down on the folks who run the state parks, the meetings are always pleasant to plan for and never fail to live up to our expectations. While there is no evidence of the same technique as that employed by the high-powered sales manager on the occasion of the final pep talk to his staff of Fuller Brush men, I do believe that the administrators who attend these meetings at the beginning of the heavy part of the outdoor season get rest, refreshment and recreation, to say nothing of respite from ordinary cares, and renewed energy to carry on when they return.

State Parks and Democracy in Illinois

CHARLES P. CASEY, Springfield, Ill., Director of Illinois Department of Public Works and Buildings

I HOLD it no coincidence that parks in Illinois and the Nation have undergone the greatest development of their history during the past seven and one-half years, which have been not only lean years, but turbulent years, and for many peoples of the earth, even bitter years, full of heartbreak and disillusion.

Not only economic breakdowns, but moral and spiritual stresses which these years have visited upon us have made it imperative that we set aside appropriate portions of our public estate in which to play, to find relaxation and to revisit the scenes amid which our ancestors established a new order and tamed a reluctant wilderness.

Not so long ago, I heard Dr. Eduard Lindeman, the well-known educator and author, express views on public recreation and the use of leisure time which I think should govern all of us in our relations with our work and with the public. Dr. Lindeman faced the issue squarely. The problem that now confronts us, he says, is: "Whether it is possible through the right kind of activity for us to develop the leadership, courage and foresight, needed to save our Democracy."

A nation of people whose leisure time is devoted to brutalizing or frivolous activities is bound to be a nation devoid of those qualities which

lead to enduring success. We have only to look back into history as far as the Roman Empire to realize that disaster follows in the wake of the hippodrome and the bloody arena. On the other hand, the results are equally disastrous when regimentation governs recreation, and leisure is turned into an opportunity for incubating national hatreds, racial prejudices and warlike ideals.

It is becoming more apparent from year to year that the kind of habits necessary for sustaining the democratic system of government must come from the proper use of leisure. This is particularly important, because in America today the average worker labors only 40 hours a week. He sleeps 56 hours and has 72 hours left in which to do as he chooses. Definitely it is our duty to help provide opportunities and means for the useful employment of those 72 hours.

That this objective has been kept in the mind of our Illinois park planners is demonstrated by the enlargement and improvement of our existing recreational facilities and in the provision of new parks and memorials for the people of Illinois, during the past seven and one-half years. As early as January 11, 1937, at his second inaugural Governor Horner was able to report that substantial progress had been made. At that time 14,000 acres were devoted to Illinois park lands as compared to a little over 4,400 acres in 1933. Today, 16,600 acres have been set aside for our 12 state parks, 9 historical parks, 16 state monuments and 27 memorials.

In giving credit for the park renaissance in Illinois, recognition must be accorded to the aid extended by the National Park Service and the Department of the Interior. Through the inspiration of this far-flung technical organization, park progress has increased beyond the wildest dream of our most enthusiastic park planners. The seed of state park development which this organization has sown has taken firm root and is producing a harvest beyond estimate in value, returning a perpetual premium of education, recreation and the art of learning to live with our natural environment in a way that will surely stamp its imprint indelibly upon our people.

Illinois was one of the first States to make use of the Civilian Conservation Corps on state park property. I am fully convinced that progress in reforestation and the development of facilities has been advanced at least a full decade in Illinois through the splendid work of this great agency.

In addition we have accomplished much by availing ourselves of services offered by the Work Projects Administration, National Youth Administration and the State Planning Commission, so effectively administered by Mr. Robert Kingery, who once served in the office which I now occupy and who is always ready to devote his time and energy to the solution of our park problems.

Besides more than tripling our park acreage during the past seven

and one-half years, we have added considerably to the services and facilities available for our visitors. Here at Starved Rock you will see many evidences of this phase of our program. Uniformed attendants are on duty at all of our parks. Food concessions, carefully supervised and regulated, are operated during the park season. Trails are clearly marked, all-weather motor roads are maintained, water and comfort facilities, trail-side shelters, outdoor ovens and a hundred other necessary adjuncts have been provided.

In the past, several of our large parks were subject to criticism because of the lack of overnight facilities. To answer that criticism we constructed this fine Starved Rock Lodge which was opened to the public April 15th of last year. We have provided lodges and overnight cabins at Giant City State Park in southern Illinois and at White Pines State Park in northern Illinois. In August we will open a new 18-room lodge at Pere Marquette State Park, which is situated near Grafton, adjacent to the confluence of the Illinois and Mississippi Rivers.

A feature recently added to the service extended by the Division of Parks has been the employment of two prominent naturalists, Father George M. Link, who is stationed at Pere Marquette State Park, and Dr. Donald T. Ries, who is stationed here at Starved Rock. Both of these men, eminent in their profession, will tell you this evening of their work. Their efforts to provide public instruction and arouse enthusiasm for the natural beauties of our parks have met with a splendid reception.

Perhaps the best known unit of its kind in the world is New Salem State Park, which you will visit tomorrow. Our guest book at New Salem shows that its visitors—and there were 250,000 of them last year—come from every State in the Union and from every nation in the world. I am sure that when you have inspected New Salem's 19 restored shops and homes and the old Rutledge Tavern, when you have walked in its streets and observed the infinite care that has gone into the creation of its every detail, you will share something of the pride we take in this shrine so dear to the heart of every citizen of Illinois.

Of all the restorations in the United States, there are two which stand out in great prominence because of historical significance. These two are the Williamsburg Restoration, which was recreated by the expenditure of millions of dollars on the part of Mr. John D. Rockefeller, Jr. This restoration shows the height of colonial ease and elegance and is one of the great eastern shrines.

The other great restoration is that of New Salem in Illinois, which has been recreated through the assistance of the National Park Service and by the use of most limited state funds. This restoration typifies the rigorous simplicity of an early prairie village, which housed a man whose influence on the nation and all civilization is a tribute to the inherent rightness of American customs, opportunities and institutions.

In stressing the Abraham Lincoln tradition, we have not neglected to maintain mementoes of the earlier civilization brought to this State by the French pioneers. At Fort Chartres, at Kaskaskia, at Fort Massac and elsewhere, we have preserved the military strongholds and the homes of this great people who pioneered the development of Illinois. Just two weeks from the day this conference ends, we plan to rededicate the historic Cahokia Court House south of East St. Louis in St. Clair County. This building, constructed by a French military engineer in 1739, has an interesting history. After the passing of the French supremacy it became the first court house of St. Clair County—then one of the two counties in this State which now has 102 counties. The building was taken to St. Louis for the Louisiana Purchase Exposition in 1903 and later moved to Jackson Park in Chicago, where it remained until it was moved back to its original site in the little village of Cahokia this year. Architectural authorities tell us that it is among the finest examples of French colonial architecture to be found on this continent. We are sure that it will share in the popular appeal engendered by the Pierre Manard homestead, the Grant Home in Galena, the Vandalia State House, the old Eighth Circuit court houses and the other early government buildings incorporated in our system of parks and memorials.

Three great recreational developments now under way in Illinois are Kickapoo State Park, a 1,500-acre tract on the eastern side of the State, the Chain of Lakes, a splendid 3,300-acre marine park 50 miles from Chicago's loop, and the Illinois and Michigan Canal Parkway, which will be a consolidation of parks along the historic old canal between Chicago and LaSalle.

Last year more than 4,000,000 people visited our parks and we are expecting that this season's crowd will be larger by at least one-half of a million. We attribute this to both the improvements in the parks themselves and the improvement in our manner of publicizing what they have to offer. Two years ago we published a series of colored pamphlets describing each of our state parks. Already 2,000,000 copies of these publications have been distributed, at the parks themselves and in response to written requests. It is interesting to note that the efforts of our publicity bureau have resulted in a 300 percent increase in the number of inquiries on state parks each month this year as compared with the same months the preceding year and that a total of more than 5,000 inquiries has been received in the past four months.

A study of newspaper articles furnished by the state clipping bureau reveals that Illinois newspapers printed 260,000 lines last year concerning Illinois state parks. This material would completely fill a standard-size 100-page newspaper. It undoubtedly played an important part in interesting the public in our parks.

A colored film prepared by our staff has been shown before several hundred Woman's Clubs, luncheon and service clubs, schools and civic

organizations during the past year. We plan to exhibit this film to you tonight to give you an idea of what we have accomplished in motion-picture publicity.

An expenditure of $50,000 has been made to provide appropriate signs and directional markers on highways leading to our parks.

We now have approximately two acres of state park land to each 1,000 inhabitants in our State. Our ultimate objective is to increase our holdings until the ratio of state park acreage to population is approximately 10 to 1,000. This will require a large outlay for land and improvements, an increased park personnel and correspondingly greater park appropriations. At present we are operating on a biennial budget, made available in 1939, amounting to $897,000. Funds from other sources will bring this total up to a little over $1,000,000, which in contrast to expenditures by other governmental branches is still most conservative.

The problem of finance is ever-present and ever-troublesome. Each year budget-making bodies are harder pressed to find ways and means for financing activities involving the many governmental units, but I am sure that in the cause of parks and recreation the representatives of the people will see fit to provide the funds needed to accomplish our main objectives.

Illinois has shaken off her lethargy and has made a definite entry into the national park and recreation scene. With the National Park Service to guide us, with the continued splendid coöperation and help of the Civilian Conservation Corps, the National Youth Administration and the various work agencies, and with conferences such as this one to give us inspiration—we cannot fail.

A Message from the Governor of Illinois

THE HON. HENRY HORNER, Governor of the State of Illinois, Springfield, Ill.

EDITOR'S NOTE.—Governor Horner died soon after the Conference. This paper must have been among the last of his official statements.

IT IS with considerable pride that I have prepared this message further welcoming the National Conference on State Parks to the Commonwealth whose destinies have been part of my daily life for the past seven and one-half years. I regret that my physicians—splendid, able men, but remorseless in their regulation of my activities and habits—have forbidden me the pleasure of meeting with you on this occasion, especially in view of the fact that Illinois has never before been honored with the presence of this Conference. It is earnestly hoped that other sessions will be held in Illinois in the not-too-distant future and that Henry Horner, citizen, will then be privileged to meet with the members of this great organization.

As Governor of Illinois, I have been intimately concerned with the problem of providing, so far as government can provide, for the security, contentment and happiness of eight million people. I would have been remiss, indeed, had I overlooked the importance of developing the park lands and historical shrines which constitute the public estate of the people of Illinois.

In childhood's biblical story we learn that during the seven fat years provision was made for seven lean years. In the matter of our parks, however, we believe that the sequence of affairs has been reversed, for during the past seven lean years, lean years in human hopes and wealth, and even, on the part of some, lean years in human aspirations, a great store of recreational possibilities has been created for the benefit of our citizens for the coming fat years.

The seven lean years have given our recreational authorities throughout the nation an opportunity to plan, to construct, and to build for future generations, in a manner impossible under conditions existing during more prosperous times, when all of us were so busy trying to become wealthy that little thought was given to planning for the future or taking heed of the great natural phenomena which surround us on all sides.

These seven lean years have provided opportunity to weigh values, to commune with our innermost souls and to establish a criterion of relative worth from which all of us have emerged better fitted to face the constant problems of protecting our natural areas and providing added features for our public use.

These periods of meditation and thought and planning give all of us a breathing spell and a chance to do the things which perhaps we have long hoped to do, but never found the time. Such has certainly been true in Illinois. By planning, by skilful use of all resources at our disposal and with the magnificent aid of the Federal Government during these seven lean years, we have planted the seed of increased public service and have begun to reap a most bountiful harvest, a harvest which during the fat years would have been considered beyond all possibility of accomplishment.

I am happy to inform this Conference that Illinois has made great strides in the development of historical and recreational lands during the past seven and one-half years. We are planning for the day when no citizen of Illinois will live more than fifty miles from some portion of the public estate where he may plant his feet firmly upon the soil, reestablish his sense of values and come to a greater appreciation of the earth that created and nurtures him. When that day arrives we will have recaptured a substantial portion of the Illinois known to our forebears—a land abounding in beauty, adventure and rich tradition.

From earliest times men have felt the spell cast by this favored State of ours. Today, we are striving to retain and to recreate the scenes amid

which Father Marquette pushed his frail canoe along the placid reaches of the Illinois, George Rogers Clark marched bravely to capture Vincennes, Lincoln grew from awkward youth to manhood, and a great new commonwealth emerged from a stubborn prairie wilderness.

To illustrate the sweep and scope of Illinois which we are incorporating in our system of parks and memorials, I should like to take you on a trip along one of our highways which extends 385 miles from the State's northernmost border to its southernmost tip. Along this road you would see an unfolding panorama of natural resources and picturesque beauty matched in few regions of the earth. Starting out amidst groves of tamarack and maples and forests of white pine, you would end your tour in a luxuriant, almost semi-tropical area where grow the cypress and pecan, magnolia and locust.

The southernmost city of Illinois lies nearer the equator than does the major portion of Virginia. The northern border of the State is farther north than the City of Boston.

With such a wide range of natural phenomena at our disposal, it would be to our lasting discredit if we did not make of our parks and memorials something splendid and inspiring. In presenting the story of the progress we have made during the past seven lean years, I can truly say that a great natural inheritance, favorable circumstances, careful planning and hard work at last are winning for Illinois her rightful place among the vacationlands of America.

In our labors we have been immeasurably aided by the splendid assistance of many agencies—public and private—without whose coöperation our present accomplishments could not possibly have been effected.

Here at Starved Rock you may observe a development typical of the objectives for which we are striving in the improvement of our public lands. We have taken into consideration the fact that visitors demand marked trails, shelters, camp grounds, overnight accommodations and other facilities—but we have endeavored to provide these without impairing in any way the natural beauty of the area.

For the residents of Northern Illinois we have developed White Pines Forest State Park in Ogle County which harbors a stand of majestic white pines. Overnight accommodations have been provided at this park and a great central lodge, with its Indian motif, reminds the visitor that this once was the land of Black Hawk, the great war chief.

On the eastern side of the State we are this year developing a marine-type park, known as Kickapoo State Park.

Residents of the southern half of Illinois have in Giant City State Park the playground they have desired for years. The stone and log lodge and overnight cabins have given impetus to the Park's popularity.

Lincoln devotees find a wealth of interesting historical material in a trail starting east of Lawrenceville on the bank of the Wabash and

following the path of the Great Emancipator through Coles and Macon Counties, Springfield, and on to New Salem, south of Petersburg.

The fame of New Salem State Park, which you will visit tomorrow, increases yearly. This recreated village, where Lincoln spent seven formative years, pictures more clearly than words can describe, the vicissitudes of pioneer life. This faithful restoration is still being completed. Construction has been started on the Rutledge Mill at the foot of the bluff on which the village stands, and plans have been prepared for restoring the Hill carding mill, which will be operated by ox power.

New Salem meant much to me during the troublous times in which my administration began. Problems confronted the Nation and Illinois which were as serious as those present in our most primitive days; problems which racked the resourcefulness of the human mind and which, without inspiration, could have been erroneously solved. Frequently, during the midnight hours, after long, arduous days in the Governor's office when all human institutions and resourcefulness appeared bankrupt, I have trod New Salem's streets in solitude and tried to recreate the simple reasoning which took Lincoln to his historical heights. The inspiration gained from the memories of this frontier village and the spiritual presence of Lincoln were to me a source of renewed energy and determination to carry on during those desperately dreary months. Constantly I received renewed hope when I visited New Salem. To me it will ever be a shrine of history, of character and creation, a horizon of human accomplishment which has left its imprint on history's pages.

I do not have time to enumerate the historical backgrounds, scenic features, phenomena and facilities of all the parks. I can but mention a few of these. There is Apple River Canyon, with its abundance of plant and animal life; Mississippi Palisades, with its fantastic rock formations; Black Hawk State Park, site of the former festival grounds of Sauk and Fox Indians; Pere Marquette State Park, where the white man first set foot on Illinois soil; Cahokia Mounds, with its famed earthen monuments of prehistoric man; Fort Chartres, Fort Kaskaskia and Fort Massac, mementoes of French occupation of Illinois, and Cave-in-Rock, famed as the rendezvous of the river pirates during the early days of the Northwest Territory.

I am sure that from the deliberations of this Conference much will be evolved that will be of permanent value in directing the future destiny of our national recreational program. For this reason and because of this Conference's splendid record of 20 years of recognized public service, I am happy to address this message to its members and distinguished guests.

A Message from the Governor of Indiana

THE HON. M. CLIFFORD TOWNSEND, Governor of the State of Indiana, Indianapolis, Ind.

THE only purpose of State Government is to make people happy, and that is what is being done in Indiana. The State Government gives protection, and through this, a Department of Health was established, roads were constructed for better travel and schools were organized. Later, with so many natural resources in this State, the conservationists were asked to coöperate and state parks were provided.

That is the purpose of government. People in Indiana respect their government, and what the members of the National Conference on State Parks are doing will be enjoyed by each continuing generation.

This is the twentieth year that the National Conference on State Parks has been contributing to the advancement of government and the people through the preservation and administration of both scenic and historic areas.

I know of no more worthwhile activity. I know of none which can mean more to those who are to come after us. It is therefore with the greatest personal pleasure that I extend to members of this organization and to their guests the official welcome of the State of Indiana.

We Hoosiers are proud of our state parks; proud of the men and the women who labored to make them a reality, who established the policies, and who have carried on the administration of these areas. We recognize that these parks, together with other phases of our conservation program, constitute a major responsibility of government and as such possess a definite relationship to the social and the economic welfare of all our people.

The Indiana State Park System

KENNETH M. KUNKEL, Indianapolis, Ind., Assistant Commissioner, Indiana Department of Conservation

IT IS my privilege this evening to extend official greetings from the Indiana Department of Conservation to members of the National Conference on State Parks and to their guests. We are more than happy that you have come to the Hoosier State for a part of your twentieth annual meeting, and we hope that this formal visit will be an inspiration which will bring you back to Indiana frequently, both as an organization and as individuals interested in state parks as a part of natural resource conservation.

I am reminded that this is the third meeting of the National Conference on State Parks to be held in Indiana during the twenty years that your organization has been in existence. May I not suggest, without offense to our sister States, that since a tradition of meeting in Indiana has been established, we make this Hoosier visit an annual affair?

Indiana has, as you know, twelve state parks. Previously the Conference has held its sessions at Turkey Run and at Clifty Falls. This year you have again visited Turkey Run, paid your first formal visit to McCormick's Creek, and now you are at Spring Mill for your initial inspection of this delightful park with its restored pioneer village and other attractions. Thus in twenty years you have seen but four of the twelve parks. At that rate, it will have been three-score years before you complete an official tour of inspection of Indiana's state parks, not including the memorials and other conservation areas.

We know that you will find Indiana's other state parks of personal as well as professional interest. We would regret to think that it might be ten or twenty years before this group actually visited Pokagon State Park along the shores of Lake James; that your visit to Indiana Dunes State Park, stretching for three dune-lined miles along Lake Michigan, would be made in wheel chairs; or that our children would be showing your children the site of the cabin in which Abraham Lincoln spent fourteen formative years.

I know that those among you who attended the meeting seventeen years ago at Turkey Run found many changes—necessary developments to meet the demands resulting from increased public appreciation of, and use of, this canyon-strewn park. Yet you found Sunset Point, Turkey Run Hollow and other places of natural, scenic beauty just as they were nearly a score of years ago. That is the underlying policy on which Indiana's state parks were established and upon which they are operated today—the provision of adequate facilities to enable the people to enjoy a park, at the same time protecting and preserving the natural setting and the scenic beauty of the area.

We in Indiana are proud of our state park system. It fills a definite need in our present-day social and economic life and we know that these areas will become even more important to future generations. We know that our state parks exert a definite, wholesome influence upon the recreational life of the surrounding community, and we know also that they have an equally definite place in the economic welfare of the community in which they are located, as well as to the State at large.

Just as Turkey Run has extended the facilities which it affords the visitor, so all of the Indiana state parks must keep pace with the needs of the generations which they are to serve. It was not so many years ago that Colonel Lieber, then Director of the Department of Conservation, went to the Governor of Indiana with a proposal that authority be given for the construction of a hotel at Turkey Run State Park. He proposed the erection of a building which would have fourteen rooms—seven on either side of a central hall—providing thirteen rooms for overnight guests and one room for a bath. Permission for the construction was given by the Governor but only after he had commented pointedly upon the idea that thirteen rooms ever would be required to accommodate

overnight guests at Turkey Run. Imagine the predicament that you would have been in last night had there been only thirteen guest rooms and a common bath at Turkey Run.

The Spring Mill State Park inn, completed and opened less than a year ago, was the result of a public demand for such facilities, a demand that has grown steadily since the park was established twelve years ago. In its sequestered setting, hidden among the trees, it cannot offend the lover of nature and yet it renders a distinct service to hundreds who otherwise might not have the opportunity to enjoy this picturesque area.

I know that there is a wide variance of opinion even among those most vitally interested in state parks and the preservation of typical or unusual scenic areas over the so-called "development" program as it may apply to facilities which make these areas usable by the public.

But once the State or other public agency has secured control of an area, it has accepted a responsibility for the administration of the area in accordance with the expressed or to-be-expressed wishes of the people. Once such an area has been established, we cannot surround it with an impenetrable fence and shut the public out. We must make it available to the public, we must provide the facilities which the public demands.

In Indiana we make no claim to having the greatest acreage devoted to state parks, nor do we boast of an attendance greater than that registered in other States; but we do assert leadership in combining the natural scenic and historic settings of our parks with the facilities which make possible the fullest, richest enjoyment of these parks by the greatest number of people.

I would not lead you to believe that I, or any member of the Department of Conservation, takes credit for the success of the Indiana state park system. We can praise the parks and the policies under which they are operated so successfully without fear of being regarded as egotistical. This park system was established, its operating policies were in effect and it was already known from coast to coast when we took over the task of administration seven years ago. So well-conceived and executed were the basic policies that we have merely carried on the program with such contributions as were possible.

Some of you may not be familiar with the interesting story of the creation of Indiana's state park system. I know that you who are familiar with this story will not object to having it repeated briefly so that we all may have a better understanding of these parks.

It was late in 1915, when a small group of enthusiasts conceived the idea of raising funds by popular subscription to buy a tract of ground known as Turkey Run and present it to the State in 1916 as a centennial gift. They were successful in raising $20,000 before the sale of the Lusk estate took place, but in the auctioning of the desired land they were overbid by a lumber company. After continued negotiations and the

raising of an additional $20,000, the original 288 acres of Turkey Run State Park were acquired on November 11, 1916.

During the time that negotiations were in progress for the purchase of Turkey Run, the committee was offered the opportunity of buying several hundred acres of land in Owen County, the estate of Dr. Frederick Denkewalter, with the people of Owen County contributing to the purchase. The state park idea had become so firmly established in Indiana that this land was also acquired, and thus Indiana completed her first century of statehood with two state parks instead of the one originally proposed. That, in brief, is the story of the founding of Indiana's state park system. It would take too much of your time to describe the disappointments and the handicaps which members of that original state park group encountered and surmounted before they had realized their goal. It would be an even greater imposition upon your courtesy to trace the subsequent development of the park system, telling of the wave of popular enthusiasm and support for state parks which has resulted in our present system of twelve such areas in widely separated sections of the State.

But I do want to pay tribute to that group of men and women who conceived and successfully brought into being the Indiana state park system. Among that group was one whose interest and ability has brought to him and to Indiana national recognition in the administration and management of public parks, a man who has given many years and whom we hope will give many more years to this cause. I am referring to Richard Lieber, Chairman of your Board of Directors and for many years Director of the Indiana Department of Conservation.

There are, it is said, exceptions to all rules. If that be true, and I am sure that it is, Colonel Lieber must be the exception, as far as Indiana is concerned, to the old proverb that "a prophet is not without honor save in his own country," for we have the greatest respect for his ability and his counsel in our operation of the state park system which he had so influential a part in creating.

A few moments ago I referred to the development program that was necessary in state parks to meet public needs. Possibly I should make an exception to that statement, for I have been given to understand that the remodeling of the old Denkewalter sanitarium at McCormick's Creek—where it was necessary for occupants to pass through two or three other rooms to reach their own—did not take place immediately after the park was established. According to my information, that change did not take place for several years—not, in fact, until after Colonel Lieber took a group of newspaper men to McCormick's Creek to stay overnight during a tour of the state parks and found his room just a passageway to and from the inevitable newspaper poker game. After that sleepless night, I am told, Colonel Lieber had plans drawn for the remodeling of the Inn.

There is one phase of the operation of state parks in Indiana which for a number of years has been a source of controversy among park administrators in other States. That is the question of an admission fee. I know from a questionnaire that came to our office not so many months ago that the question of an admission fee or a service charge is the subject of lively debate—or is, as we might describe it, a "hot potato." But once hot things are allowed to cool off a little, we find them very much worth while.

We feel that we are fortunate in Indiana in having had men in charge of the state park system, at the start, who had the courage and the foresight to establish an admission or service charge for use of the parks. In fact, I question whether today Indiana could or would occupy a position of leadership in parks had it not been for this system. To me the whole question comes down to a matter of financing the parks. Either you have a system such as we have in Indiana, where increased attendance means increased operating revenue, or you must secure larger appropriations of tax funds to take care of the increased operating costs arising from increased attendance.

During the past six years attendance at the Indiana state parks and memorials has doubled. You can appreciate what that has meant in increased operating expense and maintenance. Without the increased revenue which this larger attendance has brought, we could not today point with pride to the fact that our parks and memorials as a group are more than eighty percent self-supporting.

We can look forward into the future anticipating an increase in attendance, knowing that that increase will mean a proportionate increase in funds for operation of the parks. And when our attendance studies show us that forty percent of the automobiles which enter our parks come from other States, we do not feel that our system is subject to widespread condemnation. While we are on this subject, you might be interested in knowing that a recreational study made in coöperation with the National Park Service revealed that 115,000 cars, carrying an average of nearly four persons per car, traveled twenty-three million miles in visiting Indiana state parks during the survey year.

But there is another question concerning state parks in which this group is interested, "What use is made of the facilities which we provide for visitors in our parks?" Here are some percentages which were worked out as a part of the recreational study to which I have just referred: twenty-five percent of the visitors enjoy picnics while in the park; fourteen percent camp overnight; seven percent are overnight guests at the inns or cottages; fifteen percent use the bathing beaches or swimming pools; twenty-five percent use the hiking trails; eleven percent visit museums and historical displays; ten percent enjoy the wildlife displays; three percent ride horseback and two percent participate in nature hikes and lectures.

In our state park inns we have four hundred rooms with an additional 49 overnight cabins having accommodations for 187 persons. Dining rooms have a capacity of over two thousand persons. There are less than 60 miles of park roads but 123 miles of foot trails and 100 miles of bridle paths. There are seven group camps with a total capacity of 1,200 persons; more than five hundred individual camp sites; picnic facilities for more than twenty thousand persons; and nearly fifty shelter houses and trail-side shelters.

One of the problems which we found in sponsoring year-round use of the Indiana state parks was an impression that they were summer outing places; that the entrances were barred about Thanksgiving and remained closed until April or May of the following spring. Much of our publicity and our educational program has been devoted to emphasizing the all-year value of the state parks. This effort is meeting with growing use of the parks during the late fall, the winter and the early spring. Pokagon State Park in the northeastern corner of Indiana has become a tri-state center for winter sports due to the construction of a toboggan slide, marking of ski trails and some fairly consistent coöperation on the part of the weatherman. Other parks have enjoyed increased winter attendance as well.

Thus we are constantly striving to make Indiana's state parks more attractive, more usable and more serviceable for the entire family. In this program we enjoy the fine coöperation of the National Park Service, the Civilian Conservation Corps and other work agencies. Their assistance has, to a large extent, made possible the extensive development programs of the past six years—programs which otherwise might not have been accomplished in a score of years.

I would be remiss in my discussion of Indiana's state park system if I did not present it in its relationship to the broader program of natural resource conservation which we have in progress. I know that your primary interests are in parks, their uses and their administration. In Indiana the Division of State Parks, Lands and Waters, which administers the twelve parks and five memorials, is one of six agencies making up the Department of Conservation.

This Department was formed by legislative enactment in 1919, combining what had been independent services dealing with some phase of natural resource conservation but without a coördinated program. Today all conservation activities are coördinated in Indiana. In the Department, beside the Division of State Parks, Lands and Waters, we have the Division of Fish and Game, which operates seven major hatcheries and five game preserves with two of the most modern game farms to be found in the country. Supported entirely by the revenue from hunting and fishing licenses, this division was responsible last year for the rearing and liberation of more than 162,000 game birds and nearly forty million game fish.

The Division of Forestry administers twelve state forests including three nurseries for the production of seedling trees for reforestation plantings on public and private land with more than four million trees planted this spring. The Division of Entomology supervises control campaigns against harmful insect pests and plant diseases, while the Division of Geology supervises oil and gas production and the use of other mineral resources. The Division of Engineering provides technical assistance and supervision for all construction operations.

The advantages of such an organization are far-reaching. We use the park experts in the establishment of recreational facilities at the game preserves and forests. We have trained foresters to advise us in management of the wooded areas in the parks and game preserves. We rely on the Division of Fish and Game to maintain and improve fishing in the park and forest lakes and streams. And we have experienced geologists, entomologists and engineers available to meet any problems that may arise in connection with the parks and other public areas.

You can appreciate what this coördinated program and this interchangeable staff of trained men means in the maintenance and development of our parks, how it simplifies administration and how it contributes to lower administrative costs. It is equally beneficial in the operation of the game preserves and forests and we feel that it is the best answer which we know to the increasingly important problem of natural resource conservation in all its interrelated phases.

Federated Women of Indiana and Conservation

MRS. GEORGE JAQUA, President, Indiana Federation of Women's Clubs,
Winchester, Indiana
(Read by Mrs. McDonald)

AS FAR back as 1900 we find the women of Indiana interested, more than casually, in the conservation of natural resources, when the then newly organized Indiana State Federation of Women's Clubs received an appeal from the State Federation of Minnesota for endorsement of its efforts toward good forestry legislation. We were also asked to use our efforts toward the preservation of the Palisades. At the convention of this state group held in Logansport in 1903, a recommendation of the Board was adopted, favoring "a forestry law which would provide for the renewal of forests, as well as limit the destruction of trees." This action resulted in the appointment of a standing committee called "Forestry and Civics." It was soon made a general committee, although it was even then recognized that "a committee's success will depend greatly on the prompt coöperation of the clubs."

The biennial convention of the General Federation of Women's Clubs of 1905, in Los Angeles, created a new committee of forestry, but you can see that Indiana's standing committee preceded this step of the

General Federation. It was recognized that forestry is not a local question, but is as wide as American jurisdiction.

The field for club service was enlarged to encourage the extension of the State Forest Reserve, the more general observation of Arbor Day, the protection of forest birds, and to urge the farmers to set aside a portion of each farm for reforesting. Matters pertaining to forestry in Indiana continued to be of interest to the clubwomen through the succeeding years, even though for a time there were no outstanding accomplishments to record.

In 1911, a new committee with the more inclusive title, "Conservation," was added by the Federation. Mrs. Grace Julian Clark was then State President, and her Conservation Chairman was Mrs. Charles R. Dryer, of Terre Haute. It was considered wise, however, to continue the former committee on Forestry and Waterways. We wish that we had a more adequate or complete record of that time, telling of the work of the clubwomen in the field of conservation. We do know that housing and woman suffrage were subjects occupying much time and thought for several years.

In 1914 we find the Federation represented at the Conservation Congress held in Washington, and these delegates brought reports of that meeting to the state convention of that year.

Federated clubwomen took a very active part in the conservation of Turkey Run, and its acquisition as a state park. It was the clubwomen in the immediate vicinity of this place (which was also known as "Bloomingdale Glens"), who were the promoters of the movement. As a result of an appeal from these women to the Federation, Governor Ralston appointed a commission to effect the preservation of this tract of land. Turkey Run was made a special feature of the state convention of 1915. Inspired to new effort by the enthusiasm aroused there, clubs contributed generously to the financial campaign conducted by Colonel Richard Lieber and others. They were especially pleased when this area became a state park.

At about this time the idea of the acquisition of the Dunes land, as a state park, aroused the interest of the clubwomen. The federated clubwomen of Indiana worked consistently for several years before this goal was attained. Because of Indiana's enthusiasm, the General Federation adopted our Dunes country as one of its two national park projects, which it stressed for a two-year period. Indiana promoted a Dunes Summer Camp, a veritable nature school. In 1922, on Legislative Day at the Camp, more than 50 clubs were represented by the 200 women present, and 30 members of the General Assembly attended. The clubwomen worked for over six years on this project of saving the dunes. Their efforts were finally rewarded in 1923, when the Legislature passed a bill providing for the establishment of the Indiana Dunes Park, containing three miles of shore-line and 3,000 acres of dunes.

Having achieved that purpose, the clubwomen next turned their efforts to securing, as a state park area, "Limberlost," Gene Stratton Porter's home on Sylvan Lake.

In addition to their interest in securing state park areas, clubwomen have demonstrated, through several tree-planting programs, an awareness of the need for the conservation and replenishment of our natural resources.

In about 1915 the clubwomen became interested in a forestry project —the planting of trees in honor of a General Federation President, Mary Sherman. Miss Vida Newsom was then State President, and she later served as Chairman of the General Federation Committee on Highways and Memorial Tree Planting. Trees were planted in every State in the union. Indiana's units were located at Terre Haute, Indianapolis, Booneville and Sheridan. Indiana was the second State in the General Federation to plant, during a state convention, a tree honoring some outstanding member. Many clubs and individuals adopted this idea, and many trees now in existence were planted by Federation women.

Although Indiana had progressed in the building of new highways, no provision had been made for their beautification, or for the prevention of erosion by planting. A great deal of credit must go to the women's clubs of the State for giving impetus to this phase of highway building and maintenance. They donated many quick-growing plants, shrubs and trees for use along the highways. The Associated Press publicized this project. As a result, the present Highway Commission recognizes the value of what has been accomplished through the efforts of the Federation, and gives it full credit for the inauguration of the beautification policy which is now an integral part of the highway program.

The women's clubs are now actively engaged in the work of the Virginia Claypool Meredith Memorial Forest program, near Shoals. They are proud of this growing forest. The thought of exchanging pennies for trees has intrigued them, as has the idea of building a living memorial to one whose life has been a glowing example to other women. Each year brings more contributions for the planting of new trees. Our Junior Clubs have made it one of their special projects.

As these trees are living testimonials of the affection of the clubwomen for their Honorary President, so Conservation, in its broad interpretation, is a living, growing concept in the hearts and minds of Indiana women. They are today, as in the past, quietly working to preserve the beauty and increase the resources of their glorious State.

State Park Acquisition as Viewed in California

NEWTON B. DRURY, Berkeley, Calif., Acquisition Officer, California State Park Commission; Secretary, Save-the-Redwoods League

EDITOR'S NOTE.—At the time Mr. Drury presented this paper he held the positions listed here. Since then he has become Director of the National Park Service in the Department of the Interior, Washington, D. C.

CALIFORNIA in the past ten years has increased her investment in state parks from $1,000,000 to $15,000,000; the number of parks and monuments from fourteen to seventy; their extent from 13,000 to 300,000 acres. The unified state park system dates from legislation of 1927 whereby a state park survey was authorized, and whereby there was provided a state park bond issue of $6,000,000, to be matched in equal amount with gifts.

State Park Survey. From the beginning, the California State Park Commission was determined that acquisition would not be hit-or-miss, but would be based on the major needs and opportunities revealed by study and analysis. A State Park Survey under Mr. Frederick Law Olmsted, with assistance both technical and volunteer, made a statewide inventory of those resources that might well be conserved in a state park system. Recognizing the outdoor areas already preserved in California's national parks and national forests, the plan was to supplement these in such extent as would safeguard representative examples of scenery, recreational opportunity, and sites of historic interest in a well-rounded state park system.

California's seventy state parks and monuments largely represent areas determined by the State Park Survey of 1927. There are a few outstanding areas that should still be acquired, and some acquisitions are necessary to complete and round out existing parks, but in large measure the program of the Olmsted Survey has already been fulfilled.

Classification of Parks. As acquisition policy has developed, the California park system has come to be conceived as grouping itself logically into three main categories: (1) *Scenic Reserves*, to be administered so as to hold intact the natural conditions upon which their beauty and interest depend, making them available for public enjoyment in such a way that their use will not destroy their highest qualities. The Redwood groves such as Bull Creek Flat, Prairie Creek and Mill Creek, are in this class. So are Point Lobos Reserve, the Anza Desert, and the Wilderness area at the summit of Mt. San Jacinto. (2) *Recreational Parks*, of which the ocean beaches of the south are the best example, the camping areas in or adjoining certain of the Redwood groves, and other properties devoted to various sorts of outdoor activity. The extent and types of development were determined by the commission's policy concerning the use for which such areas were acquired. (3) *Historic Monuments*, including sites or structures typifying important episodes

in California's colorful past, including the influence of Spanish, Mexican, Russian and Early Californian régimes.

Other considerations besides those of function and type of use entered into the building up of a well-rounded, state-wide system. One was the matter of geographical distribution. There had to be some sort of balance between the northern and southern parts of the State, between the coast and the interior. There has been no narrow sectionalism displayed in California. Citizens of Los Angeles County are proud of the Redwood parks of the north, and have contributed liberally toward their preservation. Similarly, the people of the north and from the San Joaquin and Sacramento Valleys seek recreation at the ocean beaches which, because of climatic and other conditions, are at their best in the southern part of the State.

Geographical considerations, however, in many cases could not govern. Availability, relative cost in proportion to public value, and many other matters had to be taken into account. Historic monuments had to be located wherever significant events took place, and scenery had to be preserved where it attained outstanding quality.

There was still another classification of types of areas; namely, their division into Redwood Parks, Seacoast Parks, Mountain Parks, Desert, Lake and River Parks, and Historic Monuments. The thought has been kept in mind that the best examples of each type, in proper proportion, should be incorporated in the system.

While the Coast Redwoods were the primary object of preservation, it was only logical that in the creation of a system of state parks the acquisition of shore and beach areas should also play a major part. California borders the Pacific Ocean for nearly 1,000 miles. Of the seventy units in the system today twenty-six are located on the shore of the Pacific. Twenty-three of these possess stretches of sandy beach—some of them the best in the State for the ocean bathing. In all, some forty-three miles of ocean frontage have been acquired. Over 104 miles of ocean, bay, lake and river frontage have thus far been dedicated to public use in the California state parks.

Process of Acquisition. After the selection of park areas through study, and their approval by the State Park Commission, there was in each case a long process of negotiation, appraisal, surveying, clearing of title and running the gauntlet of governmental procedure before purchase was consummated. In relatively few cases was it necessary to acquire land under the right of eminent domain given the Park Commission under the Act of 1927. Existence of this latent power doubtless has assisted in arriving at prices which were fair to the owner and to the public. Since 1929, almost 300 parcels of property have been acquired for park purposes and of these only six, representing a value of $88,000, have been condemned. In practically all cases the court or the jury (which the defendant or the State may demand at option) has set a

value approximating that originally offered by the State. Owners of properties have in the main proved most coöperative, many making gifts of lands or concessions in price.

Gifts Matching State Funds. The matching provision under the bond act (which is also contained in recent legislation appropriating funds for acquisition), while sometimes a deterrent to acquiring a desired property, in the main has unquestionably operated most beneficially for the State. Undesirable purchases have been discouraged by the fact that half the value must be contributed. If the public need is patent, generally it has been found that individuals or communities have been willing and able to raise the necessary matching funds.

In the main the matching principle has brought large benefits. Since the beginning of the state park program, gifts have amounted to almost $8,000,000 as contrasted with $7,000,000 expended by the State. Most of this excess of $1,000,000 was obtained under the matching provision of the bond issue. The advantages were two-fold: the prospect of matching contributions has encouraged legislative appropriations, and the fact that one dollar contributed will mean two expended for parks has stimulated private gifts. The memorial grove idea in the Redwood region has been very important in encouraging gifts, especially when matched by the State.

The Future Program. The pattern of the state park program in California appears to be rather definitely set. Acquisition of lands is only the beginning but of necessity has been governed by anticipation of future trends of policy in other matters, such as development, protection and interpretation to the public of the highest values inherent in their own properties. Then there is the fundamental problem, which must be faced in the future, as to what proportion of the total area of a State like California can reasonably be removed from possible economic use. We have the lion's share of the primeval national parks now in California. About one-fifth of our lands are now in national forests. Somewhere a balance has to be struck between inviolate protection, for recreational and inspirational use, of natural resources such as our forests and our seashore, and their utilization to meet other human needs. This problem is reflected in the growing opposition, on the part of local communities, to removal of properties from the tax roll through public ownership. We have found this in the Redwoods, and in the Anza Desert Project. This question is worthy of the best thought that can be brought to it, and presumably the final test will be the determination of the highest public good, viewed from a long range standpoint.

Looking to the future, California state park authorities like to conceive that there has been established an orderly program of acquisition for the next ten years at least. Recent legislatures have provided for (1) the purchase of lands in instalments through lease-options extending over a period of years; (2) the allocation for park purposes of 30 percent

of royalties collected by the State from oil-drilling leases on state-owned tidelands; and (3) appropriation for the current biennium from these royalties of $325,000, to be matched in equal amount, toward initial purchases, as part of a continuing program, of Redwoods, beeches and other park lands. It is expected, however, that future expansion of the system will take place, not so much through adding new parks, but more through rounding out existing parks and monuments so as to protect their surroundings and attain satisfactory administrative units. With the probable exception of much-needed recreational beaches near the populous centers of Southern California, it is felt by many that at least until existing parks have been given logical boundaries, have been classified as to function and use, and have been developed accordingly the acquisition program may well follow the course of pausing to digest the mass of properties already in state ownership. This will involve emphasis upon quality rather than quantity. It will involve the expenditure, not only of money, but of thought.

Stop, Look and Examine Every Acre

CHARLES N. ELLIOTT, Commissioner of the Department of Natural Resources, Atlanta, Georgia

A FEW years ago I made one of the most memorable trips of my life. If I live to pass the century mark, the results of that special journey will haunt me all the way. I went to sell a park and brought home a slice of public domain which looked bigger than the Pacific Northwest.

In the early days (which has not been so many years ago) of state park work in Georgia, very few persons knew that the Cracker State possessed such a thing as a state park, and an even smaller number knew what a state park was.

We felt that one of our primary and most important duties was to educate the citizens of our State in the ways of wholesome outdoor recreation. We felt also that our education, like so many other good things in life, should begin at home, and that one of our first jobs would be the education of our state conservation officials in the value of state parks and public recreation areas.

With this in mind, we planned a week-end trip to one of the outstanding state parks within a few hours of Atlanta. We invited and carried along with us a number of state officials who were interested in the conservation of our beauty spots and other natural resources.

We arrived at noon and spent a delightful afternoon examining the recreational facilities, standing almost in reverence before one of the loveliest waterfalls I know, walking a shady mountain trail through the laurel thickets and sweeping oak forests, and studying a proposed plan for expansion in order to accommodate the rapidly increasing visitors. As the afternoon waned, I became more convinced that we

were making a profound impression upon our visitors concerning the need for outdoor recreation for everyone.

That night as I slid into my bunk in one of the picturesque log cabins of the park, I secretly congratulated myself on a noble job of salesmanship.

I did not know how correct I was! Before the first misty light filtered through the tree tops above the cabin, I was rudely awakened. Through sleepy eyes I saw a scantily clothed apparition in the dim light. I recognized the dim ghost as one of the conservation officials. He sat down on the edge of my bunk.

"Listen," he said, "I've got something."

I asked if it were bedbugs.

"It's a great idea," he said, "and I couldn't wait until breakfast to tell you."

I could not possibly think of more than two ideas which were worth getting up for at that hour, but I rubbed the sleep out of my eyes and sat up.

"This park idea," he said, "is simply wonderful. Instead of a few state parks, scattered around the State, we should have a thousand-acre state park in every county."

I reminded him that Georgia contained one hundred and fifty-nine counties.

He shook his head impatiently.

"That's easy. When I tell the county officials and other folks what these state parks really mean to them, it will be difficult to keep them from giving us the entire county."

"That's wonderful," I told him. "Now have a heart and let people who have a clear conscience get some sleep."

As I dressed for breakfast, I began to wonder if that early morning visit had been a nightmare. As I look back now, I realize that it was only the beginning of a nightmare. Even today it has not ended.

That gentleman set out to acquire land. And acquire land he did! He sold state parks and the state park idea to county officials and to other influential citizens. He told them that all they would have to do was acquire and deed a 1,000-acre tract to the State. Then the State would place a CCC camp on the site, dig down into its jeans and find two or three hundred thousand dollars for materials, and in a few months a new state park would blossom forth.

He did not tell them that state parks must come up to certain specified requirements. He did not tell them state parks needed water or trees or at least some outstanding natural advantages which should be preserved for future citizens. He did not explain that almost any cut-over, eroded, waste land would not be suitable for a state park or even for a recreation area.

A few of the counties went a little balmy over the idea. They cur-

tailed their road-building program, took money away from the schools and sold county bonds, in order to invest the money in park lands. They had visions of hundreds of CCC boys with picks and shovels and wheelbarrows, transforming a piece of average wilderness into a beautiful state park which would bring visitors from all corners of the Nation.

One such area deeded to the State straddled a barren mountain top. The view from the promontory was outstanding, but the only road was a semi-passable, one-way mountain trail and the nearest water was almost a mile down under the crest of the mountain. This park was promoted by a gentleman who retained title to land surrounding the proposed park development and who knew that any improvement would increase the value of his own land.

Another such area was located in a creek which went dry for at least three months each summer. The land was cut over and the owner admitted that his only reason for selling out at a low price was that he was tired of paying taxes without realizing any income from his property.

We sat down one afternoon and had a checker game on the map of the third area. One lot had been deeded to the State, the next retained by the original owner, and the next deeded to the State, and so on. The owner saw no reason why we should not develop on lands deeded to us and allow him to develop on all other lands adjoining them.

I could name many, many similar instances. It is true that out of the conglomerate assortment, we acquired several areas of outstanding caliber, worthy of preservation and development. But only a few. The others were on the hands of the department. We could not return them to the owners because of the provision of our constitution which says that no property of the State may be disposed of in any manner, even by law, as long as there is any outstanding bonded indebtedness against the State.

We are gradually absorbing the areas in the Department of Natural Resources. Those not suitable for recreational areas we are turning into wildlife sanctuaries or preserves. We are building houses on them for use by our wildlife rangers. In several instances either the senior or junior wildlife clubs have taken over the lands as projects of their own and are making first-class game preserves out of them.

I am confident that everyone connected with my State, who has gone through the past few years, has learned a lesson in land acquisition. Since the retirement of the official responsible for successfully selling the state park program, not one acre of new park land has been accepted by the department.

Several days ago the Division Directors were holding one of the conferences we have periodically when a ranger came in and announced that he had found a tract of land which the department might acquire without cost.

"Is it timbered?" the forester asked.

"The most beautiful stand of second growth loblolly I ever saw," the ranger replied.

"What about the natural beauty and wildlife?" the parks director demanded.

"It has been a preserve for ten years," was the reply. "Game and fish are plentiful. It has two magnificent waterfalls and one large virgin tract which does not contain a trail."

"That is close to where the new discovery of gold was made," the state geologist said, "but no gold has ever been found on or close to that property."

"Without gold," the parks director stated flatly, "it will never be self supporting. We don't want it."

And if you don't believe that our parks director feels like that, ask him.

Use Areas in State Parks

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WHEN we attempt to discuss some detailed phase of state park development, such as the one which has been assigned to us today, we are immediately brought face to face with a fact which is frequently discussed by students of state park matters. This fact is that we have nothing approaching an exact and generally accepted classification for state-owned park areas. Thus the name state park means one thing to one person and to another person something quite different. Generally speaking, however, when we speak of that vague entity, a "state park," we mean one of two types of state owned areas—either we refer to a scenic area, which in the classification that I use in my own state-park teaching I call a *state preserve*, in which *scenic*, *historic* or *scientific* character is the determining factor warranting preservation, or we mean what in my classification I call a *regional state park*, that is, an area existing primarily to supply recreation in a scenic setting to the inhabitants of a definite region. Sometimes this mythical state park which we conceive in our fancy is a combination of the two types. In that case it will probably still fall pretty largely within the second class. For the purpose of this discussion when I use the term state park I will be referring to this "regional state park."

The character of park development at any time or period is a fairly accurate indicator of the social tendencies of the period. Thus in the age which preceded ours, say the period of fifty to seventy-five years ago, the park development which predominantly characterized this country was the large, elaborately developed city park, named by Messrs. Olmsted and Eliot, its creators, a rural or country park, a name derived from its possession of the character of pastoral or rural scenery.

This type of park supplied to the urban population of a trolley-car

and horse-and-buggy age very much the same type of park service which the state park of today attempts to supply to a motor-driven civilization.

During the last fifteen or twenty years the state park, that is, the regional state park, has begun to emerge as a reasonably definite park entity. This development has not been the result of any theory of park planning or any made-to-order creation of the landscape designer. It has been, rather, an evolution as a result of the need or demand which the machine-age public has indicated, guided by certain park planners here and there, seeking by study and experiment to find satisfactory solutions to the problems which this public demand has presented.

Our first wild scenic parks available to urban populations, which may be considered the forerunners of the present state park, set out to be definitely different from the country park of the same period. This difference was threefold—first, the possession of a wild or wilderness character of scenery as distinguished from the pastoral, well-groomed scenery of the country park; second, a reduced density of human use; and third, a much briefer human occupancy as regards the time people would spend in the area.

As a result the first metropolitan scenic reservations of present state park character attempted very slight and simple forms of development, consisting almost solely of roads and trails and primitive forms of picnic accommodations, combined with the preservation or restoration of the forest cover.

The public of that period required considerable effort and time to reach these areas, and the time spent in the areas was as a result naturally brief. When the automobile age came upon us, the same time and effort which had been required to visit the country park, brought within our orbit a much wider world. As a result the reservation type of park area which has become the state or county park of today became as accessible as the country park had been previously.

It is an old but very evident truism that the human race takes hold of new ideas slowly, and landscape designers and park administrators who had accepted the idea of the reservation type of park were slow to recognize that the state park of the motor age was a park of totally new character, differing from the old concept of the reservation almost as much as it differed from the country park. It was a park with the scenic character of the reservation but with similar recreational demands to the country park.

Starting with the original conception of the reservation type of park, as other park planners had, and like them, with no precedent in design to guide me, it has been an interesting adventure to me, as it has to many of you, to watch the development of state parks over the past thirty years, and the development of our own ideas with respect to their design during that period.

If we study park history and backgrounds we see that the creators of

the country park were greatly influenced by the parks of Europe which had started out, in many cases, not as public parks but as private estates. The great lawns, the carefully arranged naturalistic planting, the gardens, the floral effects, even the buildings, show their evolution from a source quite different from the final results. In the same way and often unconsciously we of today who have jointly aided in the development of this new park entity, the state park, have been influenced by the country park.

In nothing is this more discernable than in the quite general acceptance today of the idea of the so-called "use area" as a detail of state park development. The first man publicly to call attention to this scheme of state park design was, I believe, Colonel Lieber. He set it up as a definite and desirable policy or system of procedure and coined for it the name of "service area." Starting a little later and without any knowledge of what Colonel Lieber was doing, Jim Evans and I began attempting state park designs in New York State based on the same idea, using the term "use area" or "concentration area." The term which seems to be gaining general recognition today is that of "use area," as the subject is stated for us on the program. This is probably a more satisfactory name than that of service area, since in the minds of most people the term service area implies an area concerned only with purely service features, such as parking areas, toilets, etc.

The idea or theory behind our present scheme of the "use area" is much the same as that behind Mr. Olmsted's scheme of design with its European background, when he began the creation of America's first designed large public park, Central Park in New York City. In that park he set aside certain sections in which he concentrated the outstanding features of his man-made development and which were to form the chief concentration points for human use. This developed formal area was to be the center or heart of the park from which the public would radiate out to the remaining portions of the area which, while developed according to the pastoral idea of scenery, were to be kept simple, naturalistic, and without obvious evidences of man's control. In spite of the more spectacular character of these formal areas, he recognized that the great extensive areas of naturalistic scenery would give the major value of park service, that of supplying the passive or rest forms of recreational use.

The similarity between this general scheme of design and the modern state park, with its major portion devoted to wild scenery and its use areas of intensive development, is self evident.

It is unnecessary, I think, to mention at any length the reasons or arguments in favor of this scheme of design which gives us the "use area" in a state park. From the practical standpoint the cost of development is decreased by a concentration of service features, such as roads, water supplies, sanitary facilities and parking areas. The costs of main-

tenance and policing, as well as fire hazard, also are decreased by such concentration. From the esthetic standpoint there are similar advantages. The possibility of preserving the scenic beauty is, of course, increased by concentrating human use in an area which can be developed to meet such use, while at the same time we lessen human use in areas where scenic character cannot be adjusted to such use. The esthetic advantage is also quite evident in having a certain section of the park designed in such a way that large numbers of people occupying this portion will not destroy the charm and beauty of the area which the same number would do in a completely wild environment.

Both the esthetic and practical merits of the use area could be further elaborated if it were necessary. Sometimes I encounter the idea among park people that the "use area" involves the principle that we will accept destruction of scenic beauty in the area which the public uses in order to preserve such beauty in the rest of the park which the public will not use. If this idea were true, the scheme of the use area would have little to recommend it, since it would mean that the public was not seeing the scenic beauty of the park and so not getting the type of park service which is the chief reason for the state park's existence. It would further mean only that we were deferring the ultimate destruction of the whole park until such time as human use became sufficiently heavy.

It is of course true that in a state park with well-designed and adequately developed use areas a large percentage of the people will never go far afield from these areas and that those who do so will quite generally be of the type which is reasonably careful in its treatment of scenic beauty. However, if a state park is to be at all worth while, the public must secure the influence of the scenic beauty of the park, and the use area must be so designed that it will have a high degree of beauty and charm of its own. It should be impossible for people to go to the park and frequent the use area without being exposed to a considerable amount of the charm and scenic beauty of the park. Take a simple example. A large number of people may drive through fine park scenery to reach the use area, there eat their lunch in an orderly picnic ground, and then traverse attractive trails, amuse themselves in a gravel game area, or sit or lie upon a lawn or sandy beach and look out across a body of water to far stretching attractive park scenery and get as much of the spirit of the park's beauty and its naturalistic scenery as though they had played ball within a bed of ferns in a wood; yet the lawn, beach, trail, picnic and game area can take this punishment and permanently exist in more modest forms of beauty and the scenery seen across the lake or from the trails receives no destruction, whereas the bed of ferns in the woods once so used is robbed of its beauty for a long time, if not permanently. In one case we have a park in which the scenic beauty has a permanent value; in the other it becames only a transitory asset.

It is a favorite argument of mine that if any park, or portion of a

park, cannot handle the number of people who should be in that section of the park and permanently retain its scenic character, under adequate maintenance, such park or portion of a park is not properly designed.

That the design of a state park on the basis of use areas is a wide method of development and that use areas may be efficient and beautiful, I think will find no argument. There are, however, a few questions with respect to use areas which I think are debatable. To these we shall give our attention for a few minutes.

For instance, there is a theory which is another firmly held conviction of mine, that a use area should be carefully adjusted so as to accommodate only that number of people that can be absorbed by a particular scenic unit, (of which the use area is the heart) within the safe limits of what I have called "scenic saturation." This limit of human use is controllable by the location and character of the use area and by the capacity of its parking facilities. The opposing theory is that as demand increases, we must increase the size of our use areas, which means increasing the use of our park regardless of its scenic capacity of absorbing such use. Today state parks exist which function on both of these theories. A comparison of two parks illustrating these opposing theories it seems to me will show anyone quite clearly which system of procedure is the wiser. According to my idea, when the limit of safe scenic saturation has been reached, if increased human capacity must be met, a new use area in another location either in the same park or in another park must be developed. Even if the development of such a new use area is less economical than to increase the size of the old one, I still maintain that the new use area should be developed if ultimate and permanent park values are to be preserved. Just as in business, there exists also in parks the law of diminishing return.

One may of course ask just what is the point of scenic saturation for any park area or portion of a park area, and just how it can be estimated. I admit that this problem is difficult and can never be reduced to rule or formula. However, it may be determined with reasonable accuracy by a sufficiently able designer, but when the point is reached, whatever it may be, if human use is permitted consistently to exceed it, the park area is doomed to destruction.

Another important point for argument and difference of opinion is whether a park should contain one or a number of use areas. I think this question is most easily answered on the basis of scenic saturation. In my own case I have been compelled to experiment with a number of use areas in a single park. The reason for this was that in setting up for a certain park our original design, we had carefully designed a general major use area within the limits of what I considered the point of safe scenic saturation, only to live to see the day in which a CCC camp came into the park and it became necessary to design a number of new forms of park development. I admit I was 100 percent in favor of obtaining

this CCC camp chiefly to accomplish a long cherished form of development, a golf course in an area of no other recreation value. But I expected the camp would exist in the area for only a year or so—the time necessary to accomplish this major development. However, for some six years following, I had to sit up nights to find methods of locating developments which would not bring about the appearance of over development and cause an over scenic saturation in the used sections. I also wished to preserve in a very limited total area a dominant expression of naturalistic scenic character. I found this could be most certainly done by scattering developments within the limit of local scenic saturation in the form of differentiated and specialized use areas, each one well separated from the other by intervening areas of wild scenery.

In attempting such scattering of use areas I found that there were forms of public use and recreation which were distinctly different in the character of their use and in the demands which they made on scenery, and that certain of these uses were much more satisfactory and effective if entirely disassociated from other uses, while again other uses were more satisfactory when coördinated.

Another debatable question regarding use areas which follows quite logically from what I have just said is whether all forms of normal intensive park use should be combined in a single use area, or whether there should be a separation on the basis of major functional grouping of recreational development. Should we, for instance, have bathing beach and bathhouse, boating facilities, picnic grounds, game areas, restaurant, hotel (if one exists), concession stand, cabin colony, camping area, etc., with the accommodating parking area and roads all in a single general section of the park with the entire remaining area kept wild and undeveloped and available only by foot and bridle trails? There are sound arguments for this scheme of procedure, the arguments being especially sound on the practical and economic side. On the other hand, might we not locate our waterfront facilities with restaurant, and concessions, with proper parking areas in one section of the park and have our picnic and game areas in another section, and our camping area and housekeeping cabin colony in a third, and possibly our hotel (if one exists) in still another? There are good arguments for this form of procedure, perhaps the arguments being stronger from the social, esthetic and operative side than from the economical side.

I think it is always dangerous to dogmatize. It is possible to effect too great a concentration of use in a single section of the park no matter how well designed the use areas, and it is also possible to secure too great a distribution of development for any reasonable economy and for satisfactory scenic protection.

My own experience leads me to believe, however, that a certain amount of distribution is desirable. Thus a waterfront and concession area is wisely separated from a picnic area, and a hotel from a camping

area, and a housekeeping cabin colony from both. An effective solution is to consider our use of the park on a large scale, subdividing into major sections with corresponding use areas on some such scheme as I have mentioned, such distinct sections with their use areas being separated by extensive buffer scenic areas. This will give the greatest scenic use value as well as the greatest scenic protection. It will also secure a more reasonably economical development of roads and service lines than where distribution is too general, or on the basis of the whole park.

Still another interesting and debatable question with respect to use area is whether we should install a use area in a section of particularly outstanding scenic quality, or whether we should develop our use area in the more commonplace section, making our scenic quality area available only by trail. For instance, should we locate our picnic use area, with its tables, fireplaces and shelters, in an outstanding grove as in the case of the Beech grove we visited at McCormick's Creek—or again should we locate a fine inn on a superb viewpoint as has been done at Starved Rock? Might we not on the contrary use a finely designed picnic shelter or park inn to lend beauty to a commonplace section, keeping the more featured scenic spots for those willing to make some effort on foot to reach them. I am not taking sides in such an argument; I am only presenting the fact that an argument doubtless exists on this use determination.

When one begins to discuss the question of use areas in a brief paper such as this it is hard to know where to stop. I have tried not to get into any great discussion of details but to stick to theory to which we all need to give more attention. I also know the danger of getting down to details in any reasonably short discussion. For more than a year I have been putting in my spare time, which is unfortunately a somewhat limited amount, in attempting to prepare a publication which considers only one phase of use area development, namely, the design and development of picnic grounds. I had intended originally to prepare a brief pamphlet, primarily for student use, which would contain perhaps a dozen pages and the same number of illustrations. It has grown to a bulletin of some forty pages with about sixty illustrations.

Use Areas in Iowa State Parks

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WITH the dedication of Backbone State Park in October 1919, the then recently created Board of Conservation laid the cornerstone for what is now a state park system of which the people of the State are justifiably proud. Though leaders such as John F. Lacey, Thomas H. Macbride, L. H. Pammel and Bohumil Shimek, have long

advocated the preservation of areas of interest and importance in the State, it was not until 1917 that the law authorizing the establishment of state parks was passed. Under this law the parks were to be established by the Fish and Game Warden, by and with the consent of the Executive Council. Funds were to come from the fish and game fund for the purchase and maintenance of state parks and forest areas. A Board of Conservation was created to administer state parks, and held its first meeting in December 1918. In 1919 an act of the Legislature placed the establishment of state parks in the hands of the Board of Conservation, although the funds for acquisition were still to come from the fish and game fund.

From the moment the first option was exercised on a 1279-acre tract, Iowa has developed a park system of 75 parks with approximately 21,041 acres, with an additional 2,000 acres in the process of being optioned. At the outset, the development of use areas in the parks was limited. There was a sincere desire on the part of the first Board to preserve the natural attractiveness of the site. In 1923 the General Assembly revised the park laws, and also at that time passed the first regular appropriation of $75,000.

From the outset, the Board as well as the Legislators of the State realized that there were numerous problems pertaining to development and administration, and the law provided technical services for the Board as follows: a landscape architect to be furnished by the landscape architecture department and the extension division of Iowa State College; general engineering services to be provided by the State Highway Commission. The chief engineer of the Highway Commission is, ex-officio, the supervisor, for the Board, of all public highways adjacent to or in the park areas. Technical services are also available from the State Department of Health, the State Fish and Game Division, the Forestry Department of Iowa State College, and the Attorney General's office. The county engineer is required, when requested, to advise regarding boundary lines.

The Board was aware that planning, with the help of competent technical personnel, was essential to the success of any development program. These technicians early realized that sound planning was necessary if areas were to be properly utilized.

The foresight of the State Legislature, the Board of Conservation, and the Fish and Game Commission, in the preparation of the 25-Year Conservation Plan should also receive due credit. Until 1933, when the Plan was released, there had been no extensive inventory made of Iowa's natural resources, and no coördinated plan had been prepared or followed. The Plan was prepared by various experts on conservation from within and from outside the State. The report stated, "We believe that this report records the desire of the people of Iowa to exercise forethought through planning. Their first interest just now is to avoid

wasting available funds. By establishing a long-term schedule of development on which every dollar spent will be well spent, an enormous economy is assured as compared with haphazard, uncorrelated conservation." At the time the Plan was prepared there had been no indication that any Federal agency would be set up for park development work. The coincidence that the Plan and report were released just in time to get in on the "ground floor" of the CCC program was quite fortunate for the State Park Program. When the first camps were being allotted, Iowa presented to the Federal authorities a plan for park development that resulted in a large number of camps for the State in the summer of 1933.

The soundness of this program is evidenced today by the principles of design and development of use areas in the Iowa park system. All improvements are being carefully planned on the basis of need, suitability, utility, cost, and probable maintenance expense. The improvements in each park are not made because some other park has certain facilities, but because the improvements fit into the general scheme for the use of the area.

Throughout the development of the state park system in Iowa, those in charge of the administration and the development program have kept in mind the following objectives:

1. Provide the necessary facilities for use by the park visitors.
2. Provide for the proper use and enjoyment of the area by the visitors.
3. Keep to a minimum the artificial developments, and keep those that are provided in as close harmony with the surroundings as possible.
4. Keep in mind the ultimate maintenance expense and keep it as low as possible.

Those now in charge realize that planning is necessary for proper development and use of any given area. They are also aware that considerable study is necessary before the development of an area is actually begun. They have found that this procedure simplifies their work and has prevented serious mistakes in actual physical development. In the development of use areas in the state park system, Iowa has established a definite procedure consistent with master planning for areas and the provision of facilities for park visitors.

Fencing. Though not provided for the specific use of the visitor or contributing to his enjoyment, our first step upon acquisition of a new area is the establishment and fencing of the boundaries. We have found that fencing the area as soon as possible has contributed more to the conservation of flora than any other phase of the work. As soon as stock is shut out, all of nature's wiles are brought into play, and numerous plants which were kept down by grazing begin to make their appearance.

Roads. One of the first facilities demanded by the public is means of access to the area. This usually requires the construction of some type of entrance road. In the development of park roads we must realize

that the accepted standards for highway construction are not acceptable to the park plan. The same principles and materials may be used but they are handled in a different manner. At first some roads were rather narrow, but we are now using a 24-foot roadway in most cases. Where heavy fills are required we use a 26-foot to 28-foot roadway. Particular attention is being given to alignment and grades, and the manner in which the road will fit the topography and natural surroundings. Ditches, fills, side and back slopes are flattened and rolled in an effort to blend them into the natural landscape with as little intrusion as possible. As a rule, steep grades are not permitted. However, on certain occasions short sections of 10 percent grade have been used, although the standard is 8 percent. Our roads have, for the most part, an ease of grace and curve found on the highway system, although the maximum speed is 15 miles per hour.

Water supply and sanitation. In the development of many areas it is possible to defer the construction of certain facilities for some time, while other areas must be ready for use when opened. We consider the provisions for water supply and sanitation ahead of even our road development.

While the public is using the area, no matter what part, it is our duty to protect the health of the visitor and provide for his comfort and pleasure. In this connection, it is doubly important that the water supplies be pure and adequate, and that sanitary facilities be sufficient and as modern as conditions permit. Both facilities must be properly maintained at all times. The State Department of Health coöperates with us by making tests of the water, field inspections, and sanitary surveys at least once each season in all parks, and more often in the larger parks. Proposed construction of water supply and sanitary facilities also carry their approval.

Water Supply. With but few exceptions, the drinking water comes from deep wells averaging 250 feet in depth. An approved type of hand pump may be used in places where the use does not warrant the installation of a pressure system. At one area in southern Iowa, where it was not possible to obtain a satisfactory water supply from a deep well, we constructed a modern plant similar to those in cities where surface waters are used. Water is pumped from the lake into the plant, where it is settled, filtered and chlorinated before it is pumped into the park lines for distribution to the various points in the park. Tests of the water are made each day to be sure that it is safe for human use. Where pipe lines are used, drinking fountains and spigots are provided. These spigots are a self-closing faucet of a type approved by the Department of Health.

Toilets. In all heavily used areas the provision for toilet facilities must receive considerable attention. This is one subject on which there is much variety of thought. Many favor the installation of flush toilets, others prefer the pit type of toilet. In Iowa we have used both.

Sewage Disposal. During the last few years more attention has been paid to the problems of sewage disposal. At present two types of sewage treatment plants are being used, the septic tank equipped with dosing tank and a sub-surface tile field, and the Imhoff tanks equipped with sand filter beds. Where local conditions are such that it is not possible or advisable to construct a central sewer system, the septic tank is used.

Parking Areas. In the public use of any area, parking areas have an important part. If they are not located in close proximity to the specific use area which they are to serve, they will not be used. Special conditions, topographic and otherwise, determine the design and layout of parking areas. The most satisfactory solution, and the method in general use, is the one in which the use area is separated from the parking space by a natural or artificial barrier. Parked cars are at any time unsightly, and it is desirable that they be screened from view.

The parking areas themselves consist of one or more lanes, which may be parallel or not as conditions may permit. Each lane is made 60 feet in width, and in the case of two or more lanes, they are usually separated by a planting strip of from 5 to 20 feet in width. The 60-foot lanes allow for two parking strips, 20 feet each in width, and a 20-foot roadway. Under present conditions, any width less than this is unsatisfactory and may require supervised parking if it is to operate efficiently.

In heavily used areas the entire lane may be surfaced with gravel or crushed rock. In some instances the crushed rock has been placed to form a base—a mixture of crushed rock and black dirt placed on top, and the area seeded. This method gives an excellent base and covers up a large expanse of unsightly parking area.

There is a direct relationship between the size of the parking area and the use area. Only sufficient parking space should be provided to accommodate the cars of those using the area.

Picnic Areas. Development of picnic areas in the older parks was a matter which was left pretty much to the judgment of the landscape architect in the field. Our older picnic areas, for the most part, were located in shady groves and on level ground. Usually a table and fireplace, or several tables and one fireplace, constituted the group.

In one of the newer tracts, under more ideal conditions, we are experimenting with a new type of picnic area development. We have a heavy existing undergrowth and the required shade. It is planned to provide a loop road, with parking at various points, and to develop small areas off these parking spaces. This type of development we call the cove picnicking area. Natural barriers between the coves provide sufficient screening so that various groups will be separated from others. This development is now under construction and it is not possible to report on the usage at this time.

In some cases where the picnic area is somewhat removed from the parking area, open type shelters are provided.

Artificial Lakes. As a result of emergency work by the various Federal agencies, several areas now have artificial lakes. The construction of dams and the impounding of water to create these lakes have necessitated the development of active recreation areas, and the provision of facilities for the use of the public. Development of these areas usually consists of a parking area, bathhouse, beach and sanitary facilities.

In this case, it is necessary to construct the beach from whole cloth, the limiting factors being the size of the lake, type of shore line, and probable use.

Bathhouses. Bathhouses of a permanent type have been provided. The general plan of these structures is quite standardized as to the units to be included. We use open type dressing rooms, with booths for women, and benches for men. Where possible, roofs are left off, as we feel that sunlight is a very excellent antiseptic. The main part of the building is roofed over to provide space for the checkroom and refreshment stand. Showers and toilet facilities are provided, and are usually supplied by a lake water system. Bathers are required to pass through a sterilizing solution upon leaving the bathhouse for the beach, and upon their return to the dressing room.

Life lines of an approved design are provided in these areas as a matter of protection to the public. Flood lights are provided to encourage night bathing.

The operation of the bathhouse, furnishing of lights, life guard service, beach umbrellas and water sports equipment, is by the concession method. Private individuals are given the exclusive right for furnishing bathhouse services. The Commission regulates the maximum fee that may be charged for this service, and places certain requirements on the concessionaire with regard to what he may sell.

Camping. Camping is permitted in many of the Iowa parks. In providing for the camper, Iowa has not gone as far as some other States. In practically every instance we have designated an area as the camp ground, cleared it of underbrush, placed a fireplace and tables, constructed a shelter, toilets, and installed a water supply. So far camping in the state parks by those bringing their own equipment is negligible.

Trailer Camping. As yet the State has not provided special facilities in any of the parks for the "trailerite." Development plans have been drawn up for inclusion of these facilities, but we are delaying actual construction as we are not entirely certain that this is a desirable use area for the parks. At present we have had little demand for facilities of this kind. When there is a request, the trailer is assigned to the regular camping ground.

Special Facilities. One of the problems in our park development program is the insistence of some groups that certain types of recreational facilities be provided that are not really functions of state parks. We constantly receive requests for the construction of tennis courts, swim-

ming pools, and the installation of playground equipment. It is our contention that such features are functions of city parks and not of state parks. So far we have been able to avoid developments of this type.

Cabins. In eight of 75 parks we now have cabins. It is only since the advent of the CCC that funds have been available for the development of this type of area. Two types of cabin areas have been developed—one which is for the individual family, and the other for group camping. In two of the eight parks the facilities are designed primarily for group use, and in the other six for family use. In both cases, the design is flexible enough so that the cabins may be used for either group or family use, depending upon the demand.

In the case of family use, the cabins accommodate four people. The visitor is required to furnish only bedding, linen, and food. A small charge is made to cover the cost of electricity used for cooking and lights. Cabins are modern, and are connected to the main sewer and water supply. A charge of $9.00 per week is made and each party is limited to a two-week period of occupancy.

In the case of group camps, a central dining room and assembly hall is furnished, and each camper is charged a fee of 25 cents. Additional service is offered at actual cost to the State. In this case the cabins themselves are not equipped for cooking. Cots are provided and each cabin will accommodate eight persons.

For the most part, the cabin and group camp areas are well segregated from the main use areas in the park. Where natural barriers did not exist, the camp areas have been screened off by planting.

Naturalist Program. Establishment of a naturalist program in 1937 has led to considerable use of nature trails in the various areas. During the summer of 1939 full-time naturalists were stationed in eight of the park areas. The public has responded enthusiastically to this phase of recreation.

While the majority of the visitors go to the parks during the summer months, there is an increasing interest in winter sports. Many of the parks offer potential facilities for winter recreation. Numerous requests have been received by the custodians and the central office for skating, skiing and coasting areas. Where local interest is sufficient to justify the expense of maintaining such facilities, the Commission is very willing to do so.

At present three areas have toboggan slides available to the public. These facilities have been very popular, and the State is very much interested in encouraging this activity. Additional areas were opened for coasting and skiing during the past winter.

Lodges. In 15 of the parks enclosed lodges have been erected. These structures are provided with fireplaces, furniture, and other special facilities, such as kitchens and heating systems. As there is considerable investment in these buildings, certain rules and regulations have been

drawn up relative to the use of these lodges. Any group desiring to use the park lodge for a special date may make a reservation with the custodian. A small fee is charged for such use of the lodge to cover lights, firewood, and so forth. Although a lodge may be reserved for use, a casual park visitor is not precluded from entering it for legitimate purposes. Permits to organizations to use the lodge for purposes of raising revenue are not granted.

We can acquire and develop state parks if we have the necessary funds and labor, but we cannot take the people to the parks or make them use the facilities which have been provided. We have attempted to develop on a sound basis, anticipating as much as possible the desires of the park visitors. Our facilities have been accepted and used by the public in a very encouraging manner. It is surprising to note that the increase in yearly park attendance is almost in direct proportion to the increase in the number of parks and preserves.

Nature Recreation in State Parks

REV. GEORGE M. LINK, Director of the State Nature Guide School, Pere Marquette State Park, Grafton, Illinois

NATURE as recreation has been the fashion many times in the past. To say it is again coming into style is simply to admit what is fairly common knowledge. A tremendous movement is on foot to get us back to the earth. And because it is a movement, a "green movement," you might say, there will be a great deal of satisfaction and fun connected with joining in on it.

People are going to be happy letting themselves be taken along with the current of an enthusiasm as sane and healthy as this. But we must not think of this new fad as something actually new. Nature study is no new thing; and always it has been pursued by people of vision, has always met with sincere approval. Silent but none the less determined forces have been at work preparing the way for what now seems to be truly a whirlwind of interest in birds and trees and rocks. And while the story of the earth beneath our feet, of flowers and plants in general, and of the creatures moving among them is becoming more and more a familiar tale, it has all the freshness of a dewy morning or an evening's glow.

Schools have been in the vanguard of this movement. They recognized long ago the curious anomaly of an educational system that teaches children alertness in all the branches of human and artificial endeavor, and neglects those of the divine. Yet in a transition period such as we are passing through now between the pioneer period of the past and a coming settled discovery of the real art of living, little effort has been expended—outside of schools where real nature love was sedulously inculcated—in teaching and training our boys and girls to a proper

appreciation of the common things around them. So children have filled their free time with frivolous and meaningless activities. Society, the newspapers, commercialized amusement concerns furnished them with the springboard whence they leaped and then plunged down into a vortex of highly spiced, high-geared forms of entertainment, leading nowhere, exhaustive of nerve force, of mental energy, too often of moral strength as well.

In order to remedy these evils it is paramount to get back to saner, quieter, more relaxing types of recreation. In a wise article entitled "Living With the Weather," its author says:

> What would seem to be more desirable for our northern stormy area is not athletic competition for a few but an abundance of quiet exercise for each individual. We need walking, hiking along country paths, quiet games of tennis, baseball, or golf without a gallery of spectators, and any other form of exercise that does not stress the competitive side. One of the most valuable developments of America that could be undertaken would be the opening of foot-paths through the countryside around each city, where people would find a release from motors and other city distractions. Such a chance for escape from the present machine dominance of life would aid immeasurably in the fight to preserve a better mental equilibrium. In England, all through the warmer half of the year, the widespread network of foot-paths is well used by hiking parties over the whole Island. People there spend a vacation of two weeks, not always at a crowded seashore or summer resort, but very often on a walking trip entirely away from cities and the intricacies of civilization. They come back calmed and rested, ready for another battle with the modern industrial pace of life.

Types of recreation, therefore, that lead somewhere while they are entertaining us, are what we need, leading us to a love of our native homestead so full of surprise and adventure, to a patriotic glow for our fatherland, to contentment with our station in life, to health of body in the clear pure air outdoors, to relaxation so needed in our strenous living today, to a knowledge and grasp not only of those subtle inter-relationships in nature and to a scientific attitude, but also to an understanding of ourselves, how we work and function as we grasp the inner meaning of nature, to attempt to see, as St. Augustine once said, the thoughts that God thought when He fashioned and molded the natural world as we see it today.

The schools, I say, have been actively sponsoring this form of education. Where they get over into the kindred field of science and biology, they are again going back to what is easy and familiar, to man-made things, not to the infinitely dear and complicated mystery of nature itself. Willard N. Clute, that dyed-in-the-wool botanist, extremely careful of the scientific aspect of his work, nevertheless could say and say well:

> It is a pleasure to find that somewhere on our planet the botanical student's attention is still directed to the more beautiful and esthetic aspects of creation instead of emphasizing present-day courses in botany where the student becomes

goggle-eyed staring through a compound microscope at some minute plant section in a class where half a leaf about suffices for the term. Nobody questions the need of the technical man for careful laboratory instruction in the minute structure of plants, but to teach such things in a beginning course for all students is sheer nonsense and only increases the number of people who have been exposed to botany but did not take it.

Again if the schools simply rhapsodize without giving facts to youngsters, then they come perilously close to sheer sentimentality. It is an insult to a young person to imply by our gushing that he cannot see or appreciate things in nature. As Abbé Dimnet says:

> Anybody familiar with country people even of the most uncultivated sorts, realizes that they appreciate natural beauty, a landscape, the last smile of autumn on a wood, a sunset, the flash of a wild bird, quite as much as a professional artist or versifier. All they lack is words or oftener confidence.

No, what the teacher and the parent, the recreation leader and the club director must do, is to become familiar with the world of green, growing things. What better opportunity for this than now, when so many wonderful books on nature flood our libraries! When pictures and illustrations are so good, what possible excuse can there be? When good nature guides are becoming a common thing, when study clubs and nature leagues mushroom on every land, and lectures at museums and courses in adult classes and nature camps are forever being offered, how can teachers live so far apart from life that they do not catch the enthusiasm?

A great commonwealth like the State of Illinois has set aside parks and preserves, has initiated natural history and geology surveys in order to be constantly at the service of the public, to offer opportunities to the people of the State to become acquainted with their home country. How much public tax money is being expended in order that we might preserve for ourselves and our children a little of the fast-vanishing wild-life of our forests and fields? And this is as it should be. It is not only the politicians who are far-seeing on this matter, it is we, the citizenry, who are. The cry of Charles Lindbergh—"How long can men thrive between walls of brick, walking on asphalt pavements, breathing the fumes of coal and of oil, growing, working, dying, with hardly a thought of wind, and sky, and fields of grain, seeing only machine-made beauty, the mineral-like quality of life?"—does not fall on unsympathetic ears. Most people recognize the truth of his conclusion, "This is our modern danger—one of the waxen wings of flight. It may cause our civilization to fall unless we act quickly to counteract it, unless we realize that human character is more important than efficiency, that education consists of more than the mere accumulation of knowledge." And we may add: "And that recreation consists of more than a mere eternal round of professional athletics, commercialized entertainments, socials, and high teas, flamboyant dances and night club atrocities."

Progress in State and Local Parks

Compiled for THE AMERICAN PLANNING AND CIVIC ANNUAL by FANNING HEARON, Associate Recreational Planner, National Park Service, Washington, D. C.

COÖPERATION of Federal, state and local authorities continued in 1940 as the major factor in the development of state and local parks and recreation areas. Operating under the Park, Parkway and Recreation Study Act of 1936, these authorities, with the overall help of the National Park Service, have completed preliminary state-wide plans and programs of recreational facilities and needs in 31 States, started a regional study of these facilities and needs of the South-Central States, and made arrangements for such a survey of New England.

To tell the country about this progress and what it indicates for the future, the National Park Service is about to complete and release "A Study of the National Recreation Problem." This publication will be the first of its kind and will give the whole recreation subject a coverage it has not had since the providing of recreation for all the people attained the status of a public responsibility.

Helpful collaboration in the rôles of consultants to each other were provided by Federal, state and local individuals and organizations in carrying on the program for more recreational areas with more adequate facilities. Six States—Arkansas, Iowa, Kentucky, Louisiana, Mississippi and New Mexico—were assisted by the National Park Service in the drafting of legislation to cover general and specific state and local situations.

The Park Service's national report on the recreation problem will indicate that, since 1933, the number of state and local parks and recreation areas in the country has increased from 816 to 1,527; that the acreage (exclusive of the New York Forest Preserve) has grown from 965,057 in 1933 to 1,633,171 at the end of 1940; and that the attendance has increased in the same seven years from 61,297,000 to 96,831,000.

In 1940, as in the other years since 1933, greatest impetus given the nation's program for adequate state, county and metropolitan parks and recreation areas was provided by the funds and manpower of the Civilian Conservation Corps and the Emergency Relief Administration. These energies, which it is estimated have sent the recreation program ahead 25 years in seven years, are directed through the joint efforts of the state and local recreation authorities and the National Park Service, most active Federal agency in the field.

During the fiscal year from July 1939 through June 1940 official National Park Service figures show that $6,512,933 of Civilian Conservation Corps funds was invested in state, county and metropolitan areas in 44 States, Hawaii and the Virgin Islands. These States include all except Connecticut, Delaware, Nebraska and Nevada. Figures on CCC expenditures do not include funds which pay for the CCC labor

On Federally-owned recreational demonstration areas $591,864 of CCC funds was put into projects in 15 States and $2,501,405 of Emergency Relief Administration funds was invested in projects in 20 States.

On Federal areas such as national parks, national monuments, battlefield parks, historical parks, historic sites, military parks, parkways and the recreational demonstration projects were used CCC funds totaling $3,542,566 and ERA funds amounting to $5,201,397. A breakdown of the figures reveals that national parks and state, county and metropolitan areas represented the largest field of investment.

Biggest state, county and metropolitan area CCC investments were in Illinois ($581,761); New York ($448,160); and Texas ($448,036.) On the recreational demonstration areas the biggest investments were in Pennsylvania ($399,209 of ERA and $133,422 of CCC); Missouri ($280,541 of ERA and $61,196 of CCC); and Tennessee ($219,105 of ERA and $30,063 of CCC).

Actual accomplishments in the year are indicated by the following figures on some of the more important projects. On state, county and metropolitan areas the CCC built 63 foot and horse bridges, 16 bathhouses, 173 overnight cabins, 36 combination buildings, 10 lodges and museums, 358 other buildings, 1,726 camp stoves and fireplaces, 3,526 picnic table and bench combinations. On state, county and metropolitan areas the CCC also developed 246 acres of campground, 482 acres of picnic grounds and 676,697 square yards of parking areas and overlooks.

The Emergency Relief Administration's contribution to this nationwide coöperative program is evidenced by the following achievements on recreational demonstration areas: 6 bridges, 135 cabins, 7 lodges, 80 other buildings, 52 table and bench combinations, 25 miles of foot trails, 54 stoves and fireplaces, 53 acres of picnic grounds. These ERA projects are in addition to the work on the recreational demonstration areas done by the Civilian Conservation Corps.

In the 23 States east of the Mississippi River which comprise the Service's Region One, "active developmental, planning or investigational enterprises" were in progress during the year on approximately 150 state, county and metropolitan areas. In carrying out this program the representatives of the Region One office had the coöperation of 45 state or local administrative agencies.

In this eastern region 21 States were assisted in carrying forward the Park, Parkway and Recreational-Area Study, and a Service study was initiated in one of the two States not coöperating. The results included the submission of three state recreation plans and reports, advanced preparation of five others, and preliminary work concerning another two. Five non-federal agencies received assistance in the initiation of leadership programs on 23 areas. The Service, through its Region One office, also aided in the establishment and operation of the Virginia Natural History Institute which was opened at Swift Creek Recreational Demon-

stration Area, Virginia, as the first nature leaders' training course in the South. A maximum enrollment was reached.

New gains were recorded during the year in the serviceability of the 53 organized camps available in the 22 recreational demonstration areas of the region. Four hundred and fifty agencies made use of camping facilities for a total of 240,000 camper days while more than 1,000,000 visitors were accommodated by the 15 available public areas.

Federal participation in the planning and development of recreational facilities in state, county and metropolitan park areas within the 14 north central States comprising Region Two, was on a more stabilized basis during the year than was possible heretofore, according to the Regional Director. Supported by an established policy of advanced planning, including studies of outdoor recreational deficiencies and needs, with interpretative reports on existing facilities, the Regional Office was able to give direction to various types of participation financed from Federal funds allotted to state, county and metropolitan park officials.

In all areas where the Service had active supervision over construction and development forces, the work was carried out in conformity with approved master plans which had been kept up to date. Job control procedures were followed smoothly and expeditiously. This was possible because of the growing recognition of local park authorities of their responsibilities in the preparation of plans and the better understanding of the coöperative relationships between the local and Federal Government.

Outstanding among the more important jobs in this region, completed or well along by September 30, 1940, are: The huge, unique amphitheater in the natural setting of the Red Rocks near Denver; restoration of more locks along the old Illinois-Michigan canal to provide active water use of this historic area near Chicago; additional units in the restoration of the New Salem Village in New Salem State Park, Illinois. These units include the Lincoln-Berry Store, Onstott Stable, Trent Brothers' Stable and Rutledge-Cameron Mill.

Other prominent projects in the region completed or well advanced are: Winter sports facilities at Pokagon State Park in Indiana, and new cabins and a major saddle barn development at Turkey Run in the same State; fish hatchery, rearing ponds and game farm at Meade County State Park in Kansas; the Forest Inn structure, superintendent's residence and service area at Minnesota's famed Itasca State Park.

"The expansion of the park-use programs in Region Two," says the Regional Director, "is enabling people, in increasing numbers to benefit more fully from their visits to park areas. Year round naturalist programs are being conducted in some of the parks in Michigan, Illinois, Missouri and Indiana. This year Michigan and Iowa joined Indiana, Missouri and Illinois in providing state supervisors for their programs. The programs include the preparation of nature notes for distribution in park areas and

the writing of nature columns for local and metropolitan newspapers; special and regular nature tours, campfire sessions, and illustrated lectures both within and outside the park areas; the organization of nature clubs and nature projects; the establishment of trailside museums, nature exhibits and self-guiding nature trails; the establishment of coöperative relationships with state universities, newspapers, radio stations, and local, state and Federal agencies; training conferences for park leadership."

Work was continued on ten recreational demonstration areas in the 14 North-Central States chiefly through ERA projects, though CCC camps did participate in these development programs on seven areas.

For the 1940 summer camping season there were 17 group camps available, with three units now assigned to the National Youth Administration at the Waterloo Recreational Demonstration Area in Michigan, providing camping facilities for approximately 150,000 camper use days during the summer period. In addition a considerable number of camper days were expended through short-term permits prior to and following the ten-week seasonal permits.

Emphasis was given throughout the year to the development of public use areas and maintenance and operating facilities.

The Southwest, which comprises most of the Third Region of the National Park Service, may become a "proving ground" for a new policy in the coöperation of Federal and state agencies toward the development of state recreational areas on Federally-owned lands. The Congress has authorized the War Department to grant the State of New Mexico an easement on 640 acres of Federal land which fronts on the 16,000-acre lake created by the Conchas Dam in eastern New Mexico. This dam is a flood control project constructed by the U. S. Army Engineers.

To develop this land into a recreational area which will serve the people of Colorado, Texas, Oklahoma and Kansas, as well as those in the home State of New Mexico, the National Park Service has offered to coöperate with the New Mexico State Park Commission and the War Department. The project proposal indicates that CCC labor and funds will provide overnight cabins, concession and bathhouse building, bathing beach, boat docks, picnic units, roads and provisions for camping. Before the project can be completed the New Mexico legislature must enact a law to accept the War Department's easement deed.

Other notable progress in Region Three during the year include: Completion of CCC-built ski runs, ski tow and ski lodge in Hyde Park near Santa Fe, New Mexico; start of construction of fishing village in Lake Catherine State Park, Arkansas; completed dams in Cleburne, Daingerfield and Huntsville State Parks in Texas; completion of six housekeeping cabins, a custodian's residence and playfield at Garner State Park in the same State; start of construction of a golf course, two tennis courts, custodian's residence, stable and show ring, arboretum

and a combination building, including a museum, in Tyrrell Metropolitan Park in Beaumont, Texas.

Also in Region Three: There were important additions to the use facilities in seven Oklahoma state parks. The Boiling Springs area in that State was completed and turned over to the Oklahoma authorities; 23 housekeeping cabins were finished at Lake Murray State Park; five such cabins, an entrance road and superintendent's residence were completed at Beaver's Bend State Park; and similar facilities were finished at Robber's Cave, Osage Hills, Roman Nose, and Quartz Mountain.

In Utah, a harbor for small motorboats was completed in Provo Metropolitan Park; and in the Farmington Bay Game refuge, more dikes were added to improve the area for migratory birds.

Work in Arizona areas included completion of eight overnight cabins, a playfield, and water reservoir, in Hualpai County Park, near Kingman; concession building, stable, utility area, and ten picnic ramadas, in Phoenix South Mountain Metropolitan Park; and utility group, stable, custodian's residence, and lodge, in Tucson Mountain County Park.

In the planning field in Region Three is the study of the series of four reservoirs on the Lower Colorado River just above Austin, Texas, with a view toward development of the reservoirs and the surrounding land into a coördinated recreational area. At the request of the Lower Colorado River Authority and the Texas State Park Board there was an allotment of Public Works Administration funds to enable the National Park Service to coöperate in determining the area's recreational value and to prepare a general plan for its proposed development. The land area involved is about 316,000 acres; the area of the four reservoirs about 62,000 acres. This is the first such study made by the Park Service of recreational possibilities around a series of reservoirs.

In the Far West, covered by the Park Service's Region Four, the year's progress has been marked by work accomplishments typical of that done in the other parts of the country, and a prominent feature has been study and planning—broad and specific—of local, state and regional situations.

In the State of Washington a study of the recreational problems of the Grand Coulee Dam area has been started. The Bureau of Reclamation, the Federal agency in charge of the dam's construction, has set up committees to study the several problems of the area and has designated the National Park Service to handle recreation.

The California State recreation study is making good progress and probably will be published in the spring of 1941. This study is a survey of the existing areas and facilities to determine the needs of the people for different types of areas. It points toward a general program for the development of a comprehensive, coördinated system of areas which will meet the requirements of people for recreation near home, as well as

tourists and vacationists. Such a state study fits in with the broad national plan for facilities in all sections of the country. Coöperating agencies are the California State Planning Board, California State Park Commission and the National Park Service.

In the Los Angeles community there is serious study of the problem of beach erosion control with an eye on the provision of adequate beach recreational facilities for that part of the State. This study is separate from the State survey but is geared into the whole machine. This project is one of those being considered by the Southern California Coastal Drainage Basin Committee. The Committee has the coöperation of the Los Angeles County Planning Commission and the California State Park Commission, as well as the National Park Service.

Similar to the Conchas Dam project in New Mexico will be a recreational development around the Sepulveda and Hansen dams and reservoirs above the City of Los Angeles if H. R. 10050, introduced by Representative Carl Hinshaw, of California, meets with Congressional approval. This Resolution would authorize the Secretary of War to execute an easement deed to the City of Los Angeles for occupancy and use for recreational purposes of the land fronting on these reservoirs and the water in the reservoirs. The Los Angeles Board of Park Commissioners has been active in the matter.

Of exceptional interest among Far Western projects of the CCC has been the continuance of the work at La Purisima Mission State Park near Lompoc, California. This work, designed to be the re-creation of a mission community, rather than a strictly restoration undertaking, has reached the point of completion of the main structure and of the mission gardens and pools. The whole task is based upon a great deal of painstaking research; its accomplishment has required CCC boys to master types of construction such as are met nowhere else, and to gain and exercise a great variety of skills. Even in its incomplete state the mission is attracting rapidly increasing numbers of visitors.

Park and parkway work on Riverside and Seven Mile parks, on the Spokane River below Spokane, is nearing completion, providing simple recreation facilities and a lovely drive for the city and those who live nearby. The same CCC camp has just finished a ski lodge near the summit of Mt. Spokane, in the 16,000-acre state park of that name, as well as other summer and winter recreational facilities. Outstanding, too, have been the extension of facilities at Silver Creek Falls State Park and Recreational Demonstration Area, near Salem, Oregon, where the magnificent forests and astonishing series of lofty, year-round waterfalls give the area distinction among western state parks.

Development of the Humboldt Redwood State Park in California has virtually reached completion. This has been a task requiring real restraint in the interest of maintaining unspoiled and unmodified, the beauty and grandeur of the virgin redwood forest.

Highways and Transportation in Relation to Each Other and to Other Planned Development

EDITOR'S NOTE.—The following is a Preliminary Report to the National Conference on Planning, San Francisco, July 1940, by the Highways and Transportation Committee of the American Society of Planning Officials. The committee was composed of HARRY F. AUMACK, Engineer, City Planning Commission, Spokane; BURTON W. MARSH, Director, Safety and Traffic Engineering Department, American Automobile Association, Washington; D. GRANT MICKLE, Traffic and Safety Engineer, Michigan State Highway Department, Lansing; LADISLAS SEGOE, Planning Consultant, Cincinnati; I. S. SHATTUCK, Chairman—Planning and Traffic Consultant, Oakland.

INTRODUCTION

Past Highway and Transport Policies and Effect on Development. The rational, long-range development of our highway system, whether for the Nation or the urban region, is but a part of the larger problem of developing a properly coördinated and balanced system of transport facilities of all types in which each is to function within its respective sphere of economic utility and each will be in scale with the present and potential demand for the particular type of service. A long-range program of highway development for the nation must needs be integrated with and be a part of a comprehensive national transportation plan embracing all types of transport—water, rail, highway, air, and pipe line. Likewise a plan for an ultimate major street and highway system for an urban area, to be sound, must be part of a comprehensive local transportation plan, in which highways are integrated with transit, rail, water, and air transport, and their terminal facilities and operations. All of this must be attuned to desirable community development.

The policy of providing new or improved transport facilities, or offering lower transportation rates to communities or regions already best provided with such facilities, was the policy which private enterprise followed in building our canals, turnpikes, and railroads. The extreme concentration of population and manufacturers in relatively small areas,[1] which is regarded by some as unsound or undesirable for the economic and social well-being of the nation and now from the standpoint of national defense as well, is largely attributable to these policies. While new forms of transport and successive advancement in transport technology created increased possibilities for the diffusion of urbanization, population, and economic activities, the policies and practices pursued by private enterprise in respect to both the providing of facilities and the fixing of charges operated to encourage concentration.

[1]One half of the population of the country was located in 189 counties in 1930; at least one-fifth in the metropolitan areas of New York, Chicago, Philadelphia, Detroit, and Los Angeles; one-seventh of 1 percent of the total U. S. land area contained 43.8 percent of all wage jobs in 1929, and two-thirds of the factory jobs were contained in an area only 5 percent of the nation's total.

Similar but even more conspicuous is the typical pattern of our larger cities, with their small intensively developed central areas and their far flung, sparsely settled suburbs, likewise due in considerable measure to much the same policies in building turnpikes and providing transit facilities. Any plan for a more adequate city and suburban traffic, transit, and transportation system should, in addition to meeting present and anticipated traffic needs, aim to further a better balanced urban pattern, more economical to build, maintain and operate.

Bureau of Public Roads Report, "Toll Roads and Free Roads." Recently, proposals for the provision of new and better highways have seemed to take precedence over all other transportation considerations. The United States Congress, partly because of conviction in some quarters that a national network of modern "superhighways" would prove economically feasible on a toll basis, directed the Chief of the Bureau of Public Roads to investigate and report on the feasibility of such a toll system.[1] *The resulting report, "Toll Roads and Free Roads," published early in 1939, is a milestone in highway planning progress.* The Bureau of Roads reported not only on the proposed system of toll superhighways, which it found infeasible from an economic standpoint, but also on the necessity of a comprehensive system of free highways for the Nation. This report presented a proposed system, with recommended design and construction standards, and discussed highway planning and construction problems of first importance in carrying out any comprehensive scheme of highway development.

Formation of ASPO Committee on Highways and Transportation. This report and the American Society of Planning Officials' keen interest in the proper consideration of, and planning for, highway and transportation facilities, led to the appointment of this committee by ASPO. The committee, composed of planners and traffic engineers, was charged with the duty of considering the whole subject of highways and transportation in and around cities, and the function, location, and design of such facilities with relation to each other and with relation to other planned development. It was further charged with the duty of reporting on this subject at this National Planning Conference.

Outstanding Features of the Report, "Toll Roads and Free Roads." The Bureau of Public Roads report, "Toll Roads and Free Roads," is undoubtedly one of the most important contributions to highway planning that has ever been made. Its comprehensive nature is due primarily to availability of data from the various state-wide highway planning surveys which have been conducted with such intelligence and far-sightedness under the able direction of the Bureau of Public Roads and with the coöperation of state highway authorities. If similar data had been available ten or fifteen years ago many of the errors in planning, design and construction could have been prevented. It is encouraging that the

[1]Section 13 of the Federal Aid Highway Act of 1938.

Bureau of Public Roads and state highway authorities are availing themselves of the data now at hand in developing the many miles of street and highway systems which are even today inadequate and obsolete.

It is well to have a factual report evaluating the proposal for toll roads. The constructive value of the report, however, lies in its proposal for a national system of free interregional highways and its intelligent exposition of the many considerations and problems involved in the planning and development of such a system. The report has many excellent and interesting features, chief of which is the conclusion that the highway problem in and around cities demands first attention of federal and state highway authorities, thus confirming the view which many of us have long held. Others are:

1. The various data from the highway planning surveys and their analyses.

2. The estimates of probable usage and revenues of a toll system and the conclusion that a system of toll highways will not be feasible from a revenue standpoint and will not solve the highway transportation problem of the United States.

3. The conclusion that urban areas (except the smaller ones) cannot be by-passed, since they are the major sources and destination points of highway traffic and since relatively short haul movements are in the majority.

4. The suggestion that highway plans be considered in the planning of low cost housing projects.

5. The recognition of the need of highway protection. (a) By controlling use of and access to abutting property. (b) By adequate design of the highway itself, such as sufficient width of right-of-way, provision of service streets for local traffic and parking, etc.

6. The discussion of the need for the exercise of excess condemnation for protective design, and the need for legal liberalization of the term "public use" as applied to excess condemnation.

7. Advocacy of the principle of "recoupment taking" of land (taking for profit) in excess of that needed directly for highway purposes.

8. The 26,700-mile master highway plan, proposed for establishment by law as the primary highway system of the United States.

9. The high standards of design and construction recommended for this system.

10. Recommendation that a Federal Land Authority be established and that such an authority be empowered to secure land in advance of construction of Federal, state and local projects and to hold it and lease it to the governmental bodies as needed.

"Toll Roads and Free Roads" is broad in point of concept and in understanding of problems relating to future development of highways, but of necessity the report had to hew to the line more or less and could

not address itself to related types of transportation and general community development. It is quite natural, therefore, that planners and traffic engineers, operating in the urban areas on which the attention of highway authorities is now focused, should undertake a study of all the transportation and planning considerations that are involved.

PRELIMINARY FINDINGS OF THE COMMITTEE

The Highways and Transportation Committee is presenting preliminary findings, consisting of fundamental considerations in the planning of highway and transportation facilities in and around cities, both in relation to each other and to other planned development. They are not necessarily conclusive, but it is hoped that they will stimulate serious thought and study on the part of planners and traffic engineers and the various public agencies concerned with highway and transportation matters and planning in general.

I.

That no major highway improvement should be undertaken except as a part of a comprehensive long-term plan of a major street and highway system of the entire urban area or region, which in turn should be derived through studies and be an integral part of a broader plan of transportation facilities—local, suburban, and long distance—including all forms of transport for the entire urban area or region.

Local Plan of Major Highways Must be Prepared. Except in small cities, traffic on highways in and around urban areas is predominantly of local origin and destination, and the problem of providing more adequate facilities for handling this traffic, is, therefore, predominantly a local problem. It should be remembered also that the local legislative body will have much to say about the type, location, extent, and cost of any proposed highway project. *The relative need for such projects can only be determined by reference to a major highway plan showing all highways, present and future, of major importance.*

Public Transit Cannot be Ignored. Proper planning and construction of traffic-ways, and the control of the development of the community through the application of sound principles of city planning simplify, to a certain extent, the task of providing for traffic. Yet the present complexity of traffic composition and movement creates a new and important need for street appurtenance and regulation, or a need for traffic planning. As population density increases, the use of the private automobile as a means of individual transportation decreases. In any community the extent to which the motor vehicle fills all of the transportation requirements is dependent upon economic considerations and personal convenience. In the light of low ration of persons per automobile[1] it appears that the economic factor has not been given adequate

[1]There is little variation in average automobile occupancy throughout the nation. In round figures this average is 1.7 persons per automobile.

consideration in comparison, for instance, with the factor of individual convenience. When flexibility and speed as potential advantages of individual transportation diminish, the resulting condition of congestion discourages further use of the automobile, and population turns to other means such as are provided by the bus, street car or rapid transit.

The central sections of cities have been the scenes of concentrated commercial activities. These activities have attracted greater and greater usage of street facilities within and directly contiguous to them. Centralization has been desirable because it brings in close contact related activities, thus limiting the cost of conducting business. Short distances between offices and stores in the commercial section are analogous to the conveyor lines in our industrial plants. Centralization has kept overhead low. Centralization, however, has made it less possible and more costly to provide additional facilities for street traffic, while at the same time it has increased the demand for them. The tendency toward universal adoption of individual transportation has aggravated rather than improved the situation, and decentralization has often resulted. As a result of decentralization, businesses are scattered, overhead is increased, and the need for the transportation of persons between points at greater distances not only spreads congestion but is responsible for an increase in the total passenger miles traveled. This additional overhead cost, due to decentralization, must be added to that of congestion and accidents to arrive at a measure of the price we pay for our present composition of community travel.

Therefore, it is essential that in planning for the movement of persons and goods within metropolitan areas consideration be given to both individual and mass transportation.

Freight and Passenger Terminals Must be Considered. Plans for highway facilities must also recognize the relationship between highway locations and present and probable future locations of local and long distance freight and passenger terminals, also anticipated changes in methods of freight handling. The only way this can be done is through the medium of a comprehensive plan, geared to requirements of each type of transportation in terms of relative public service performed by each, and including future adjustments necessary for an efficient interchange of persons and goods from one form of transportation to the other.

II.

That the long-range transportation plan should—in addition to meeting present and anticipated needs—be in accord with the master plan of development of the community and region.

Interrelationship between Highways and Transportation, and Community Development. The long-range transportation plan should be designed to further a community structure and pattern, such distribution of land uses, population, economic and social activities as will tend

to minimize waste, conflict, danger and strain, and as will enhance the efficiency, convenience, amenities, and general satisfaction of urban living. The coördinated transport plan for the city or urban region, the long-range plan of highway facilities, and the highway improvements to be built thereunder are most likely to contribute towards such betterment of general community development if they are conceived of and evolved as organic features of comprehensive, long-range community plans, or master plans.

There are so many interrelationships between the various features of the master plan that a full discussion is not possible. Furthermore, relatively few communities have master plans, combining all the elements of community development that properly should be included. The committee finds that the principal reason for this is inability of local planning agencies to obtain the means and the necessary support for such comprehensive planning, and, as pointed out later on in this report, such support in the way of adequate staff and funds as well as coöperation and assistance by governmental agencies responsible for the carrying out of public projects is urgently needed. Another reason is that over-all planning is usually lost sight of in the promotion and public acceptance of isolated projects; superhighways, low-cost housing, public buildings, recreation facilities, etc.

Expediency, Not Planning, has Guided Public Projects. Local governmental agencies, in the recent scramble to obtain federal assistance on projects through PWA, WPA, etc., appointed planning bodies without funds, or used existing inactive planning bodies to enable them to satisfy federal requirements as to approval of projects by local planning agencies.

There are instances when public housing projects have been located on main highways principally because of the advertising value of the locations—more people will see them.

Numerous other examples could be cited, but they are too well known to require mention.

Relation between Highway and Public Housing Projects. In "Toll Roads and Free Roads" it is pointed out that "There is growing danger that these . . . developments by the Government in its slum-clearance projects, will block the logical projection of the needed new arteries into the city center." The conclusion arrived at is that "Since the actual accomplishment of such (highway) projects will at best require time they should now be planned in order that their eventual courses may not be barred by newly created property."

This statement on the part of federal highway authorities is encouraging, but the planning of a system of highways is not the complete answer; in considering the effects of highway and housing projects on each other it becomes apparent that housing projects, indeed the rehabilitation of entire blighted districts, should be planned. This is not the responsibility of highway authorities, but of local planning agencies.

Housing and highway projects might not only interfere with each other; they might seriously impair or enhance the value of each other, as the case may be, as follows:

The highway may slice through a logical neighborhood unit type of housing project, thus destroying its potential unity.

The highway may be located with reference to the possibility of subdividing a blighted district into smaller units each of which might be more easily developed into a housing project as a result of such division.

The highway in a broad right-of-way may provide needed space and a fire break in a blighted district, and if constructed in the form of a parkway can raise the residential desirability of abutting properties.

Plans for reconstructing entire blighted areas, particularly when such areas are conveniently located with respect to the central business district, and industrial districts, as they usually are, may make it more desirable and much more economical to provide mass transportation facilities than new highway facilities. Such housing plan, as part of the master community plan, will influence the relative need for new highways and transit facilities in the long-range transportation plan.

Transportation Shapes Urban Development and can be Utilized as a Planning Aid. The development-shaping power of transportation facilities, particularly highways and transit lines, should not be lost sight of, as it evidently has been in various proposals for building express highways in urban areas. These proposals fail to take into account a desirable urban pattern, the appropriate location of districts for restricted residential, multiple residential, business and industrial uses.

A network of high speed highways superimposed on the average American city in competition with existing mass transportation facilities is likely to have a number of results, some not readily apparent. It is possible that the new facilities may cause great enough losses[1] to private operating companies to cause the discontinuance of those services with resulting loss of property values in areas formerly served. There is likely to be an acceleration of movement to the suburbs, leaving behind new blighted areas. This movement would mean a waste of existing utility services in districts vacated and the provision of new services in outlying districts. Central district parking facilities would no doubt become still less adequate because travel would be increasingly by individual vehicles. In order to avoid the exorbitant cost of providing sufficient off-street parking facilities to meet the demand, numerous business establishments would probably move to subcenters. Industries of all kinds using motor vehicles for the assembling of raw materials or the shipment of finished products could be expected to take advantage of locations on

[1]The short-haul patronage in the more central areas would be reduced. The short haul is the life blood of the transit business. Express operations are uneconomic unless a certain density of patronage can be developed at all express stations, and unless certain portions of picked-up passengers can be deposited at stations along the line.

express highways and in the absence of zoning regulations new industrial plants are likely to spring up in unexpected places, even in the suburbs.

Express highways may *not* be in competition with mass transportation, if they can provide for express bus operation. Transit experts are not all in agreement, however, that this is a complete answer; they point out that the short haul, not the long haul is the life blood of their business.

The planner and traffic engineer will do well to consider these possibilities, not with the idea of throttling community growth but with the idea of directing it towards a desirable pattern in which the various major residential, business and industrial developments will be located in districts suitable for the purpose rather than scattered inefficiently and mixed inharmoniously throughout the urban region.

Transportation can be the tool of the planner and traffic engineer in furthering a desirable urban pattern. All of the various media—local major streets, high speed highways, local and suburban transit—should be utilized in an effort to develop the urban districts in accord with the desirable general pattern of the entire community and region. Admittedly, there are very few existing planning agencies equipped with the money or the directing and working personnel necessary to develop a comprehensive master plan of desirable and economic community development. This condition cannot be set up as primarily the result of lack of zeal on the part of planners and planning officials; it is a result of numerous conditions and difficulties, which will be touched upon later on in this report.

III.

That the need for additional transportation facilities be measured after traffic engineering has been applied to make the most efficient use of existing street and transit facilities.

General Scope of Traffic Engineering. Traffic engineering as a profession is advancing rapidly. Many state highway departments, and certain cities, now employ traffic engineers; more cities should. The services of a traffic engineer are needed in each urban area of any size.

Traffic engineering includes many activities, the study of the characteristics of existing movements of all types, the behavior and necessary improvements in vehicles, the behavior and education of individual drivers and pedestrians, the redesign and improvement of existing street and transit facilities, the adequate traffic design of new facilities, etc.

Relatively few American cities have taken full advantage of the opportunity for bettering traffic conditions through the application of the most modern traffic engineering methods. One of the most important traffic engineering activities is obtaining the maximum efficiency, convenience, and safety from existing street, highway and transit facilities. Numerous individual improvements can be made in the existing cir-

culatory system of any city, each with a certain resulting facilitation of movement and protection against hazard. The cumulative beneficial effects of all possible improvements is certain to be substantial. Stated in other words, more people can be transported faster in the same amount of street space or along the same transit line and at greater safety.

Typical Traffic and Transit Improvements through the Application of Traffic Engineering. Typical such improvements, consisting of construction items and items of regulation and control, are:

1. *Redesign of hazardous and complicated intersections*—such as by reshaping the intersection and providing traffic islands to channelize auto movements and reduce lengths of cross walks. Corner curb roundings to free right turns may be all that is needed. BENEFITS: Reduce vehicular and pedestrian hazard, increase traffic capacity of intersections, increase vehicular and transit speeds by reducing delays, reduce the necessity for traffic signals.

2. *Revision of arterial street system, signing certain through routes for certain purposes.* BENEFITS: Facilitate all traffic movement, keep through traffic out of congested areas, keep commercial traffic primarily on specific routes, reduce over-all accidents.

3. *Improvement of traffic signal operations*—such as by timing signal operations for progressive movement, catering to transit operations when necessary.—BENEFITS: Increase street capacity for automobiles and transit units, increase over-all speed by reducing delays, decrease accidents.

4. *Removal of unnecessary signs and signals.* BENEFITS: Increase over-all speed by reducing delays, reduce the motorists' contempt for traffic regulations, which is occasioned by unnecessary regulations.

5. *Lane striping of all lanes on heavily traveled streets for their entire length; also all lanes approaching major intersections.* BENEFITS: Increase traffic capacity, increase speed, decrease hazard due to crowding and sideswiping, secure better curb parking, decrease delays from improper intersection turning.

6. *Elimination of curb parking at certain times and places*—such as during rush hours on central district streets and main arterials, on narrow streets having transit, on all transit streets opposite safety zones, etc. BENEFITS: Increase street capacity for automobiles and transit vehicles during rush hours, increase vehicular and transit speeds, decrease hazard, decrease vehicular and transit delays at corners.

There are a multiplicity of additional items all assisting in the convenience of movement with safety. A few only are listed below:

7. *Control of the hours of commercial delivery in congested districts.*

8. *Elimination of corner sight obstructions: signs, hedges, fences, etc. that block off a view of intersecting traffic.*

9. *Use of standard traffic devices, signs, signals and markings.*

10. *Posting speeds that signals are set for on progressively signalized arterials.*

11. *Controlling pedestrians by use of safety islands at street car stops or in the middle of wide streets.*

12. *Regulating the lengths and locations of curb cuts for driveways.*

13. *Improving street illumination and the illumination of safety islands, etc.*

14. *Stressing the necessity of enforcement of bad driving practices,* including lane straddling, turning from wrong lane, weaving, driving in the center of the roadway, double parking.

15. *More intelligent time regulation of curb parking and its enforcement.*

These improvements will do more dollar-for-dollar good than will the construction of spectacular elevated highways. In every urban community the need for additional expensive transportation facilities will be lessened if traffic engineering is utilized to make the best use of what exists. In every urban center, therefore, the need for such new facilities should be measured

after improvements in traffic conditions through the application of traffic engineering have been appraised.

IV.

That transit must be an important item in any urban traffic engineering program.

Traffic engineering plans for improvement of existing facilities cannot ignore transit. As has been stated, surface transit facilities, street cars, buses and trolley coaches, are used most heavily in congested areas, where individual automobile travel becomes difficult and where parking facilities are at a premium. In general, the larger the city, the greater the riding habit[1] on transit facilities. The proportion of transit passengers to total persons traveling daily to and from the central business district increases generally with the size of the city. In most cities of 500,000 population or more, this proportion is one-half or greater.

Transit Travel must be Evaluated from the Standpoint of Congestion and Economics. There are two outstanding advantages of transit travel under congested conditions:

1. *Transit vehicles are the most economical users of street space in terms of passengers carried.* (a) A surface street car line on one track with local stops can transport up to *13,500 persons per hour in one direction*, (b) A motor bus line with local stops can transport up to *9,000 persons per hour in one direction*, (c) A trolley coach line can transport more persons than a motor bus line, but not as many as a street car line, (d) One lane of individual automobiles on a street having normal intersections has a maximum passenger capacity of only *1,530 persons per hour*[2], (e) Even a lane of automobiles on an elevated highway with no intersection interference has a maximum passenger capacity of only about *2,550 persons per hour*,[3] (f) There is a staggering difference between the maximum capacity of an express highway lane and that of an express transit line, with multiple unit train operation. The latter has an hourly capacity up to *60,000 persons per hour in one direction* or almost *24 times the capacity of the express highway lane.*

2. *Transit passengers need no parking facilities.* In existing cities under present demands, curb parking spaces in central districts are at a premium. Parking time limits below a certain figure are not generally reasonable, cannot be enforced strictly, and provide no accommodation for the long-time parker. So there is little opportunity of increasing curb parking turn-over thereby increasing the number of parking stalls available during the business day. The parking problem in central

[1]Riding habit is the ratio between revenue passengers carried annually and the population of the community served.

[2]Based on average occupancy of 1.7 persons per automobile and lane capacity of 900 automobiles per hour. There are very few streets on which this figure is exceeded. Many streets have a maximum lane capacity close to 700 vehicles per hour.

[3]Based on average occupancy of 1.7 persons per automobile and 1500 automobiles per hour.

districts, therefore, resolves itself into one of obtaining additional facilities off the street; a conclusion which is now generally accepted.

The parking problem in each urban area should be intimately studied with relation to all the factors involved, which are many. In any such study it is quite important to recognize that one of the important modes of transportation, namely public transit, needs no parking facilities for its passengers.

While this Committee does not recommend curb parking elimination as a hard and fast rule for application in urban areas, certain readily apparent benefits can be pointed out: (a) Parking elimination will increase the capacity of central district streets. Commercial loading may continue to take place at the curb, but even so, the problem of double parking will be solved. (b) Transit riding may be increased, particularly if off-street parking spaces are not available to fill the demand.

Any parking study must go thoroughly into matters of cost and financing of off-street facilities and weigh these with the probable benefits in order to arrive at an economical justification of such facilities.

If any extensive highway development program is projected, such as, for instance, that proposed in "Toll Roads and Free Roads," it must be realized that the central district parking problem will become still more acute and that, consequently, this problem must be taken into consideration.

Certain Transit Improvements Should Be Made.

1. Increased speed of transit operation. One great advantage of the individual automobile over the transit vehicle is in the matter of speed; the running time is less between point of origin and destination. On short trips in congested areas, this advantage is about offset by parking difficulties. Transit properties, however, should do much more than has been done in the way of modernization of equipment. Modern transit equipment, streamlined street cars, trolley coaches and motor buses have far greater speed possibilities than the older equipment. Based on experience in cities where modern streamlined street cars[1] have replaced older units on certain lines, over-all schedule speeds[2] on lines have often increased, sometimes as much as 15 percent. Actual speed increase on portions of lines is greater than over-all schedule speed increase, since the latter is the result of dividing line mileage by hours of operation, including layover time at terminals.

Traffic regulations on heavy transit streets, such as prevention of

[1]The cars are the P.C.C. cars and others having somewhat similar characteristics. The P.C.C. car was developed by the President's Conference Committee of the American Transit Association and has numerous improvements including fast and comfortable acceleration and deceleration, comfortable seats, quieter operation, pleasing appearance, etc. Up to March 1940 about 1,200 modern street cars had been placed in operation, in thirteen cities in the United States and two cities in Canada.

[2]The possibility of speed increase depends, of course, on the traffic characteristic of each line, on the volume of automobile traffic using the same street and on the number and manner of operation of traffic signals, etc.

left turns and prevention of driving on the car track to the left of safety zones at intersections, will decrease transit delays and increase speeds. The latter regulation will not decrease intersection capacities if curb parking is eliminated opposite safety zones for a sufficient distance from corners.

Skip-stop operation, the elimination of transit stops at every other street in one direction and at alternate streets in the other direction, could be applied more broadly than it is now and with benefits as to speed. Transit managements fear public complaint against this operation, but it is believed that official traffic authorities could sponsor its inauguration as an experiment and retain it only where benefits result.

As has been mentioned, parking elimination at certain times and places, and the enforcement of double parking bans will reduce delays and increase speed.

2. *Improvement of existing transit operations.* A study of traffic characteristics of individual transit lines will often disclose that reroutings of rail and bus lines are possible. Transit managements are of course expected to be aware of these possibilities but there are many difficulties, including changes in track and track special work, the unwillingness to incur additional undesirable obligations under franchise conditions, and management inertia, that may work against a change of route that would benefit both transit and automobile riders.

Street car and bus turns in congested areas cause considerable over-all traffic delay. Many of these turns are occasioned by the location of terminal loops in the central area. Although they may be occasionally necessary for tripper car operation during rush hour service, it is believed that a great many loop operations could be discontinued.

It is believed further that slack in schedules, which occasion loafing along the line and layovers at terminals, could be taken up, particularly during off peak hours.

Transit and traffic delays can be lessened by the better supervision of the operators of transit vehicles, who often unnecessarily loaf across signalized intersections, causing unnecessary delay to automobiles. Bus drivers often fail to pull out of a moving traffic lane for curb loading of passengers, partly because of inadequacy, improper location, or lack of enforcement of such loading spaces, partly because of driver carelessness. Everything possible should be done to enforce the observance of transit schedules, thus preventing the accumulation of transit vehicles at one point. This is most likely to occur on portions of streets traversed by a number of transit lines. These vehicles delay themselves as well as automobiles.

3. *Rush hour improvements.* Control of the hours of commercial deliveries in congested areas has already been listed as a traffic aid. This control is particularly desirable in morning and evening rush hours, when streets and transit facilities are taxed to the limit by the move-

ment of persons into and out of the central business district all at about the same time.

Everything possible should be done to lessen the demand for transportation for short periods each morning and evening. Peak traffic demand is of most serious concern to transit management, since it must have standby equipment and facilities to meet such demand. A scheme for reducing peak hour demands by spreading them over a longer period is the staggering of opening and closing hours of certain downtown businesses. This scheme has had much discussion but very little application in American cities, yet its potential benefits are great.

In San Francisco, in 1931, through the efforts of a private traffic committee, certain firms in the financial district changed to half-hour earlier opening hours in the morning and half-hour earlier closing hours in the afternoon. Even though only some 10,000 to 12,000 persons were affected by the change, beneficial effects were observed by the transit companies, the Yellow Cab Company, the Railway Express Company, the police traffic bureau and others. "Before-and-after" studies disclosed that street car speeds on Market Street were increased 12 percent through the central business district. Some of the largest stores experienced an increase in business during the later afternoon, with no falling off at other periods. Certain stores actually adopted a later closing hour in order to cater to this business, incidentally helping to spread the peak. It should be pointed out that any reduction in the number of persons using transportation facilities in the peak hour is equivalent to adding capacity to streets and transit lines, or equivalent to street widening without its attending cost.

Intelligent Official Attitude Necessary on Transit Improvements. Improvements in transit operations and various traffic plans to improve these operations should be the joint concern of traffic engineers and transit managements, who must coöperate to secure needed improvements. *Transit considerations must be an important item in any urban traffic engineering program.*

Public officials must give transit managements a fair opportunity for making such improvements. One possible method would be the revision of the older street car franchises, which transit managements term obsolete and unfair. Another would be restriction of the licensing of competing transportation services. It is believed that such action on the part of public officials would release capital and create incentive which would make purchase of modern equipment and other improvements possible.

NOTE: Up to this point the committee, in considering the whole subject of highways and transportation facilities in and around cities, has dwelt on basic considerations in planning such facilities and possible improvements in existing facilities. Comprehensive planning along the lines recommended will disclose the actual need for new and better highways and when they are built standards of design and construction should assure a long period of functioning for their original purpose. Furthermore, there is a vital need

for reserving land for such projects, as otherwise the cost of ultimate acquisition will, in many cases, be prohibitive. Lastly, some official agency should be primarily responsible for the making of the necessary plans. Further findings of the committee in this preliminary report deal with these matters.

V.

That modern highways must be designed with reference to access to and use of abutting property.

General Considerations in Regard to Right-of-way Width and Treatment. The committee limits this discussion to main highways, such as trunk lines and major laterals or connections, where uninterrupted and safe movement of vehicles is the objective.

There can be no fixed rule covering the width and design features of highways; designs that are applicable in one case will prove unsatisfactory in others. It cannot be arbitrarily stated that highways shall be depressed, that they shall be elevated, or that they shall have certain widths. The problem resolves itself into the determination of just what each highway is to accomplish and the specification of those accomplishments in minimum terms. These will include such things as:

1. The planned capacity of the highway in terms of vehicles per hour and day, average and peak loads.
2. The rate of speed at which traffic is to be moved (this will be a determining factor in estimating capacity).
3. The character of the traffic to be carried; trucks and freight traffic, passenger cars only, mixed traffic. Are transient operations included?
4. The present and future character of the district traversed by the highway and the degree of protection necessary for the district and for the highway (each may detract from the value or efficiency of the other).
5. The type and frequency of access points.
6. Intersections requiring grade separations in the first instance, and ultimately.
7. The provision of service streets for abutting property, where required or desirable.
8. The closing of existing intersecting streets, where feasible or necessary.
9. The provision of extra width permitting redesign of abutting properties to provide usable sites in harmony with the character of the surrounding district.
10. The use of accelerating and decelerating lanes, center dividing strips, traffic islands, etc.

Design should Vary with Character of the Various Contiguous Districts. From the foregoing it becomes apparent that the design features for any highway will change materially as it passes through rural, suburban, urban residential, industrial and central business districts.

In rural and suburban districts a surface freeway with grade separa-

tion of all important intersections may be indicated. Unimportant cross streets may be dead ended or connected by a loop to other similar streets. The picking up and disposition of the local streets are as much a part of the problem as the design of the freeway proper. In residential areas a parkway or a wide right-of-way with depressed roadways will serve two purposes: (a) to protect the residential character of the district, (b) to facilitate the separation of cross traffic where there is much circulatory traffic to be accommodated.

In industrial districts a surface freeway with paralleling service streets may be indicated, provided there is not a large amount of circulatory traffic to be accommodated, in which case depressed or elevated roadways may be required, In high value central business districts elevated roadways have proved to be most satisfactory for through traffic which has no beneficial service to perform in the district and requires no service from the district. In central districts where right-of-way costs may easily exceed 90 percent of the total cost of a superhighway, the width of such right-of-way becomes constricted to its absolute minimum, but even this is affected by the necessity of providing connecting ramps with surface streets and by the location and design of such ramps.

The desirability of ever building an elevated highway in the high class retail portion of the central district is open to question; possibly it should skirt the district and not enter it. In an attempt to alleviate somewhat the damage to retail business values due to elevated structures, proposals have been made to run such structures through the centers of blocks.

Design Considerations through Residential Areas. Particular considerations must be given in the design of the surface highway through urban residential and rural areas, as follows:

1. The needs of adjacent and surrounding property as to the provision of service streets and access points.

2. The character of the surrounding district and the effect that the highway may have on the district.

3. The present or possible ultimate effect of the surrounding district on the highway.

The construction of a high-speed highway through urban and suburban areas may bring the highway and its contiguous territory into conflict. It may be said definitely that each will affect the other adversely if the highway under discussion is one to which abutting property has the unlimited right of access and where there are no zoning regulations or inadequate regulations. Zoning may not always furnish protection of a permanent nature in cities where it applies to property abutting a heavy traffic street to which such property has the right of access. Political bodies often find it hard to withstand the pressure of determined property owners, especially if nearly all are in accord in

demanding the right to erect business structures along the traffic street their properties abut. Absence of the right of access is more positive protection to the highway from the damage that invariably results whenever uncontrolled business districts spring up along its borders. The constant stopping and standing of vehicles along the curb line and and the confusion caused by cars entering and leaving the traffic stream reduces the capacity of the highway and greatly increases the number of traffic accidents.

The limited access highway may have a detrimental effect on surrounding residential areas. The absence of paralleling local service streets, unless sufficient flanking width is provided in their stead, may result in blighted areas. The lack of zoning regulations will accelerate the rate of blight and the depreciation of property values. On the other hand, in sparsely developed suburban communities, the construction of an express highway may encourage the development of contiguous and surrounding areas to the extent of taxing the capacity of the highway unless the development has been anticipated and provided for in the construction of the highway.

Wider Rights-of-Way are Economic in the Long Run. As has been stated, it is not possible to say what the right-of-way width for a modern highway should be. There are many factors to be considered in each case that should help determine the width, but, unfortunately, one of the most important factors is the high cost of the desired right-of-way.

From a traffic standpoint there is danger of excessive roadway width. An express highway roadway of more than three moving lanes in each direction should probably be avoided.

Economically, from the standpoint of neighborhood values and hence the maintenance or enhancement of tax returns, a wide right-of-way is far superior to a narrow one. Sufficient width to permit properly located service or access streets, with ample open or planted space between the swift moving traffic streams and the adjoining privately owned property, will tend to prevent a fringe of depreciated property values along the right-of-way. A narrow right-of-way that provides only for traffic and that leaves buildings fronting the highway on one side with rears exposed on the other, is one that will promote a fringe of blight. Blight has a tendency to be contagious; it is largely chance whether or not this fringing blight will spread through the entire district, with a resultant drop in property values and loss of tax returns. The total loss to the community may easily exceed the cost of an adequate right-of-way that would have been preventive.

Excess Condemnation May be Necessary for Protective Purposes. The consideration of ample rights-of-way necessarily leads to a discussion of acquiring enough land to permit the rearrangement or redesign of abutting property for the mutual protection of the highway and the property. It is usually the case that the route of a major traffic way will

lead through platted or developed property within the confines of a city. The practice of taking only enough right-of-way to accommodate the traffic lanes rarely, if ever, will leave fractions of lots that are of a size or shape suitable for development except for non-residential purposes. A method that offers a solution is the taking of land in excess of that required for the actual construction of the roadway, replatting it and reselling it with restrictions as to access and the use of property. In this manner a good residential district can be protected against deterioration, sometimes even benefited, and the intended function of the highway can be preserved.

Many Recently Constructed Highways are Now Obsolete. All of the well considered information indicates that there is a definite relationship between highway design and width of right-of-way, and access to and use of abutting property. If the matters of access and use could be disregarded, the width of the right-of-way could be determined by the traffic carrying requirements alone. This is not possible because the traffic load of the highway is directly related to the character of the district it traverses. It goes even further than that because the ultimate traffic load depends to some extent upon the future use of property in contiguous districts. The right of access from abutting properties and the uncontrolled use of those properties have operated to destroy the efficiency of highways. Planners and traffic engineers can cite examples of highways in their own communities that are of ample width to carry the traffic load normally imposed upon them if the right of access were limited and if the highways were not lined with all kinds of "stop and shop" businesses such as fruit stands, eating places, used car lots, tourist camps, gas stations, etc., etc. These developments have often required the relocation of a highway, recently constructed as a by-pass around an urban area, and have led to the popular use of the term "by-passing the by-pass."

The total cross section of any surface highway should consist of width necessary for traffic and an extra width necessary for protection of the highway and for protection of the abutting property. In "Toll Roads and Free Roads" there is an excellent discussion of the necessity of such excess width for the purpose of protecting the highway, and the necessity of so sloping and planting cuts and fills that they will not mar the landscape. There is a discussion also of legal difficulties in the way of preventing or controlling access to any highway. The committee intends to study the problem of access control more thoroughly and to discuss it in the final report. Also, it intends to go more thoroughly into the matter of extra width and type of design necessary for complete protection of abutting districts.

VI.

That more attention be given by public authorities to the preservation of land needed for highways in advance of construction.

Problems of Right-of-Way Acquisition and Methods of Protection for Future Acquisition. The acquisition of needed rights-of-way presents probably the greatest problem in the systematic and economical carrying out of a long-term program of major street and highway improvements. The lack or inadequacy of funds, legal inhibitions and cumbersome procedures combine to make land acquisition an almost insurmountable obstacle.

Protection of needed rights-of-way against new structures and means for acquiring such rights-of-way at the most favorable opportunity, well ahead of actual construction if necessary, are imperative for the success of a planned program of highway development. Otherwise the cost may become prohibitive or may force compromises that will whittle away the comprehensive plan.

Problems of right-of-way protection and acquisition should be recognized by all agencies concerned. In unbuilt or sparsely settled suburban areas, rights-of-way if not needed at once can often be obtained through the control of the layout of subdivisions. Effective control over private developments within the highway corridor may be accomplished, without acquisition of title, by county zoning or by state-wide regulation[1] of roadside uses and access roads. In closely built-up areas, often nothing short of outright acquisition and resale with appropriate restrictions is likely to assure the redevelopment of abutting properties in a manner satisfying the requirements of modern highway design and the desirable use and protection of such properties. Building line and mapped street enactments may, if based on comprehensive plans, utilize the police power for preserving needed rights-of-way[2] in built-up areas and may materially reduce ultimate land costs if the highway improvement can be deferred.

Early outright acquisition may be unavoidable and ultimately economical in deteriorated sections where the property costs are often about as low as they ever will be; also, in rapidly growing but as yet sparsely developed suburban areas. Funds for such acquisition are rarely available, however. Thus far the Federal government has been unwilling to assume any part of the cost of right-of-way acquisition, and States and municipalities hardly ever have funds for acquiring necessary land in advance, or the means for raising such funds.

But lack of funds is by no means the only difficulty. Others consist of statutory or constitutional limitations; narrow interpretation of what constitutes a public purpose; cumbersome, expensive and drawn out

[1]This method has had little, if any, application, but is being considered by planners and highway authorities.

[2]In California, for instance, the 1937 Planning Act authorizes the preparation and adoption of official plans under the master street and highways plan, which is required to be first prepared and adopted by the planning commission. An official plan may be the establishment of building lines or future width lines for ultimate highway right-of-way purposes, and will be enacted as an ordinance by the local legislative body.

procedures under eminent domain statutes; and the absence of, or narrowly limited, authority for the use of excess taking or excess condemnation.

Urbanism Committee Recommendations on Securing Land Needed for Public Projects. Another and fundamental obstacle to an intelligent and economical right-of-way acquisition program was and still is lack of comprehensive long-term plans for major streets and highway improvements. "It is believed to be beyond question," says the report on "Toll Roads and Free Roads," "that a proper handling of the acquisition of land for public purposes requires reasonably long anticipation and careful and coördinated planning of all the public purposes that may be affected by every proposed purchase."

The above difficulties in the acquisition of land by public authorities are not limited, of course, to highways, but apply equally to all types of essential public improvements—recreation areas, schools, public housing projects, and others. After studies of this whole problem, the Urbanism Committee of the National Resources Committee recommends as follows: "Better to control urban development, to combat land speculation, and to have land available for low-rent housing, recreational, educational and other public facilities likely to be increasingly required in the future, the Committee advocates a more liberal policy of land acquisition by municipalities and accordingly recommends the liberalizing of the fundamental laws of the State in order to permit urban authorities to acquire, hold, and dispose of land with greater freedom and to allow a wider interpretation of the term 'public use.'

"Since opportunities for land acquisition often are best when the urban community is least able financially to make such outlays, the Committee recommends that the suggested federal credit agency should be authorized to make loans to urban communities for the acquisition of both improved and unimproved real estate for the purposes mentioned above."[1]

In regard to a suggested federal credit agency: "The (Urbanism) Committee further recommends legislation creating a Federal credit agency authorized to make loans and grants under adequate legislative safeguards to state and local governments for the purposes of public-works construction, acquisition or construction of public utilities, land purchases, and similar capital outlays, and for extending credit to these governments in periods of economic stress. At the same time, the Committee believes that direct Federal expenditures in cities should be reduced to a minimum."[2]

In "Toll Roads and Free Roads" it is recommended that a "Federal Land Authority" be set up to *itself* acquire, hold, and lease to States and

[1]"Our Cities, Their Role in the National Economy." National Resources Committee, Washington, D. C., 1937., pp. 76 and 77.

[2]Ibid., pp. 80–81.

local communities, lands or rights-of-way needed for public improvements.

This Committee recommends that public officials give serious thought to these proposals in the light of the necessity of securing land needed for public improvements. The Committee hopes to be able to treat this subject more comprehensively in its final report.

VII.

That the comprehensive planning indicated as necessary herein should be the responsibility of the local planning agency, with the advice, coöperation and support of local, state and Federal officials, including traffic engineers.

Local Planning Agency Must Prepare Properly Related Plans. Enabling legislation for local planning in many States has advanced to the point where authority to plan is as broad and comprehensive as plans of local agencies can practically be. The trend is toward the adoption of similar comprehensive planning legislation in other States. In general, such legislation authorizes the local preparation of master plans, covering such things as streets and highways, transit and transportation, land use and zoning, housing, parks and recreation, public services and facilities, public buildings, general community design (subdivision standards), and conservation. The portions of the broad general master plan are effectuated by detailed plans and regulations that are enacted as ordinances under police power authority, the most common of such ordinances being zoning, subdivision and building-line ordinances.

The observation of planners is that the tendency of the courts is more and more towards a broad interpretation of the term "public welfare" in decisions on police power planning regulations, particularly where such regulations are for the purpose of effectuating the comprehensive master plan or thoroughly studied portions of it.

Planning is progressing, slowly to be sure, but progressing nevertheless, to a more comprehensive stage. Police power regulations, hardly dreamed of today, may be common practice tomorrow for effectuating the master plan.

The local planning agency has been legalized as the advising agency to the local legislative body in the development and redevelopment of the community through the planning process. It is hardly conceivable that this comprehensive legal machinery should be discarded and that some other agency should be proposed for the preparation of any portion of the master plan.

This committee finds, therefore, that *the general transportation plan of the city or urban region including streets and highways, transit and transportation, and the coördination of such facilities with other planned development, should be appropriately prepared by the local planning agency, with the coöperation of federal and state highway authorities, traffic engineers and local public authorities.*

Some of the Weaknesses of Planning Agencies and the Difficulties of Planning that Must Be Overcome. Admittedly, very few local planning agencies are prepared to undertake such an assignment and few traffic engineering departments exist or are sufficiently equipped to lend the necessary traffic planning aid. Most of them are now handicapped by a combination of difficulties—legal, financial, personnel, and others—which will have to be removed or overcome.

Inquiring into the difficulties with which planning agencies are beset, the Urbanism Committee of the National Resources Committee found: "To begin with, city planning bodies lack sufficient legal powers to guide effectively the physical, social, and economic structure of the community through the instrumentality of a comprehensive plan broadly construed. They are subject to uninformed official and public opinion which do s not fully appreciate the great importance of community planning. They often encounter jealousy and even opposition on the part of administrative departments. They suffer from insufficient appropriations and a scarcity of competent technical planning personnel. They are themselves sometimes at fault, because they lack sincere interest and vigor in performing their task of which they often have but a limited understanding or a narrow view.

"Even where legal powers and planning practices are most advanced, local planning agencies seldom have been advisory authority over all public works projects within the area under their jurisdiction, but are limited to projects of their own local government. Nor do they have such authority over the facilities of transportation, transit, and utility agencies, except when the proposed changes directly affect a public facility or public property. . . ."[1]

Of the recommendations advanced by the Urbanism Committee to remedy these difficulties and weaknesses, the following two are of special significance from the standpoint of planning for a more adequate local highway and transportation system: (1) that official planning agencies be given "the same authority over projects in the areas within their jurisdiction which are constructed, authorized, or aided by any other local authority or state agency, as is provided for projects of their own local government. There should be included in such jurisdiction the proposals before the state regulatory agencies over transport and utility matters when these involve the location, extension, or change in the use of facilities,"[2] and (2) that "A policy should be adopted by the Federal government requiring that all federal agencies submit to the official local planning body, if such exists, for its review and recommendation, the plans of all physical projects to be located in the area under the jurisdiction of such local planning body which are to be constructed, aided, or authorized by the Federal government. These

[1]Ibid., p. 63.
[2]Ibid., p. 79.

Federal agencies should consider such recommendations and should be guided in their actions by the same minimum requirements as apply under state laws or local charters to the local authorities. Included among the Federal agencies that are thus to submit their proposals to such local planning bodies should be the existing or future regulatory agencies for transportation and other public utilities when the proposals of these agencies involve the location, extent, or change in the use of facilities."[1]

This committee believes that in normal times, and *particularly in these times, from the standpoint of the national defense, adequately staffed and financed planning agencies and traffic engineering departments are essential for transportation and traffic planning. Also, from the standpoint of the national defense, prompt and vigorous action on such planning is needed.*

Assistance should be given Local Planning Agencies. The cost of preparing a master plan of street and highway development includes the obtaining of competent planning advice and direction, and the obtaining of data. These costs are manifestly a charge against the construction costs of such traffic ways, just as is the cost of preparing construction plans and specifications. Roads funds should therefore be made available for planning work of this nature. A part of Federal and state assistance in such local planning could take the form of a loan of services of highway specialists and other personnel. These authorities could properly require that local funds in reasonable amounts be made available to the planning agency as a condition of eligibility for such assistance. The existing highway planning survey data and additional such data in the future should be made readily available in detail to local planning and traffic engineering agencies. Adequately staffed traffic engineering departments are a requisite for traffic planning aid, the design of streets and highways from the surface up to meet modern traffic and safety needs.

Support by highway authorities of the idea of comprehensive local planning, and further support of the validity of the finished plan, in addition to aids already mentioned, would greatly strengthen local planning.

Zoning is a good example of the necessity of such support. Zoning regulations of the use of property and the intensity of development of property abutting highways must be prepared intelligently and adopted for many miles of highways. Highway authorities are beginning to realize this, but they should realize also, as pointed out elsewhere in this report, that such regulation can be whittled away to almost nothing by the insistent demands of abutting owners for unlimited highway access and unrestricted use. *Highway authorities must consider and be ready to act on a vigorous program of support of such regulations, once established.*

Multiple Planning Jurisdiction in the same Urban Area is a Difficulty. A complicating factor in planning is the composition of the region or

[1] Ibid., p. 79.

the metropolitan area that should properly be included in comprehensive plans. This metropolitan area usually consists of several cities and sometimes several counties. Coördination between the various existing planning agencies becomes a prime necessity, as otherwise plans proposing different community patterns may overlap and probably will. In a situation such as this the following questions arise:

1. Shall any single local planning agency be responsible for preparing the necessary comprehensive plan for the entire metropolitan area? This may be the largest city, where there is one large city and a number of satellite cities, or it may be the county, where only one county is involved.
2. Is a regional planning commission required for stimulation of local planning and securing coördination between all such plans?
3. Can the State Planning Board provide the stimulation and coördination necessary?

The Committee intends to give more study to this problem and to discuss it more fully in the final report. At the present time it does not desire to express an opinion; the problem is being pointed out as one worthy of consideration by planners and planning officials.

Conclusion

It is hoped that this preliminary report will stimulate local planning agencies, traffic engineering departments and all public agencies concerned with highways and other forms of transportation facilities, to the end that more comprehensive consideration of the entire subject be given. It is further hoped that a common interest in an important and complex problem will bring about a better working relationship between all the various agencies including private transportation operators.

The presentation of preliminary findings is for thought-provoking purposes primarily at this time. In the final report these findings may be qualified or made more specific. Some of them may be considerably altered as a result of additional study and exchange of views among the members. It should be emphasized that *this report is preliminary and that its findings do not necessarily represent the views of all committee members.*

In the final report the Committee hopes to present a more extensive and penetrating discussion of the entire subject, including the various problems briefly touched upon herein, and to indicate desirable solutions wherever possible. Contributions of data and ideas will be welcomed from highway authorities, planners, traffic engineers and others professionally interested in this subject.

Highways and Planning

PRESENTED AT THE NATIONAL CONFERENCE ON PLANNING,
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HARLEAN JAMES, Washington, D. C., Executive Secretary, American Planning and Civic Association

IN THE United States we built most of our mileage in highways without regard to the land uses of the public and private property along the traveled route. In New England the highways often followed the old Indian and pioneer trails. Even the great National Pike which was promoted early in the 19th century across the Alleghenies followed what was called Nemocolin's Indian Trail, broadened and used in the 18th century by Braddock as he marched to Fort Duquesne in the wilderness. Many stretches of the road to Pittsburgh yet follow this old trail. Over most of the three-million-odd square miles of the continental United States, as the land was surveyed, the plan was to lay out roads along the section lines providing a grid of mile-square spaces, cut into half- and quarter-miles as settlements became more dense.

As for improvements, about all that was expected was a little grading, a drainage ditch when necessary, and, across swampy land, a rough pavement of logs to make what was called the corduroy road—an all-weather road when it could be found under the snow or when logs had not rotted out or slipped to become danger traps for the unwary horses' feet. Except for all-too-occasional replacement of logs and levelings off when the ruts from the wagon wheels wore too deep for traction, the surface was kept packed down by the horses' hoofs and the iron-rimmed wagon wheels.

The roads were meant for local and through travel, the rate of speed being about the same, the edge, if anything, being in favor of the carriage or light equipage used for local transportation. Access to abutting property was taken for granted and probably the time was never envisioned when access might interfere with through or local transport. The principal use of land bordering rural highways was agriculture, but there were long stretches of untouched forest and open, grassy plains. The inns, blacksmith shops and general stores were mostly in the village settlements. These pioneer conditions persisted in the Middle West until the middle of the 19th century, in the Far West until well towards its close. We may think of them as so far in the past as to have little significance today, but when we consult our memories or the records we must recall that forty years ago few were familiar with that new and unbelievable contraption, the horseless carriage. Thirty years ago few of us owned them and not until the self-starter came into common use did many of us drive them. It was only twenty-four years ago that federal aid on any substantial scale was voted by the Congress of the United States to stimulate and hasten the improvement of a nation-wide

system of highways, known as the farm-to-market roads. The end of this era came only last year, when the Bureau of Public Roads was transferred from the Department of Agriculture to the newly created Federal Works Agency. These farm-to-market roads centered on state capitals and county seats.

I well remember my first transcontinental trip, seventeen years ago, when west of Saint Louis we found only short stretches of hard surface of any kind running out from the principal cities, and east of Saint Louis many miles of single-track brick pavement which made it necessary to run one wheel in the skiddy mud or deep ruts whenever two cars met. For all the fine designations given to the old trails, Lincoln or other highways, there was no continuous broad highway to link the east and the west coasts. A pioneer cross-country motorist picked a precarious way, without benefit of understandable direction signs, along an extraordinary number of casual unimproved roads and streets which were pieced together into a circuitous route across the continent. Most of the direction signs were large billboards where competing routes, ferries or towns were trying to lure the traveler, and there was no easy way to secure reliable information. There were tumble-down piers and small ferry boats which could be summoned, if the crew were not eating their dinners, even for the crossing of important rivers. There were long miles of deep sands which could only be negotiated with the help of sage brush and gunny sacks and sometimes, when all else failed, a tow car. There were other long miles of rocky roads not so famous as that to Dublin but disastrous to tires and springs. We are not yet entirely out of the era of the billboard bid for bridges, ferries and routings. No doubt these will disappear in the next decade and we can then depend on reliable official information as to distances and types of roadbeds.

With the advent of federal aid, toll roads have gradually been retired, though toll bridges and ferries still exist, and the recent development of parkways which are designed for through, as well as local, travel has brought a revival of tolls.

In the twenty-four years during which we have been digging ourselves out of the mud, we have paved and repaved once or more, located and relocated many miles of through highways. We have not yet a single transcontinental highway running in any direction, which was deliberately located for the sole purpose of providing for through travel. Our much vaunted transcontinental routes are still made up of state, county and local highways and city streets, laid out by some arbitrary plan or to meet local needs. These are pieced together and designated by some number which runs from coast to coast. But even today on Route 40, which starts so bravely over the Alleghenies as a paved road, there are west of Denver many miles of gravel, bound and loose, with the always recurring work periods to interfere with travel.

It has not been many years since we first became acquainted with the

by-pass road to avoid the congestion of cities and towns. In many parts of the country it is still difficult to persuade the merchants that too great a congestion of through traffic actually militates against business and makes life more difficult for their real patrons. Most of the larger cities are now provided with marked routings which circle the residence sections of the city, often marked so poorly that the long-suffering motorist loses the way several times before emerging on the main highway on the other side of town, after having traveled a substantial additional mileage in comparison with fighting through a direct route comprising the principal business streets of the city.

During these forty years in which motor travel—passenger and freight—has been developing and during these twenty-four years in which we have been digging ourselves out of the mud, we have built up the largest pleasure traffic of any nation in the world; indeed, we have more peacetime motor vehicles than any other country in the world. We have begun to see, somewhat tardily it is true, that there is a direct relationship between the use of the land along the highways and the highways themselves. When the National Pike was projected in the early part of the 19th century, we had in all the United States only a few million inhabitants. When automobiles came into common use, say about 1910, our population was 91,972,266. Since that time we have gained about 40,000,000 people and the occupied sections of the country have extended into remote highways and by-ways.

Planning in the modern sense was still in the city-beautiful stage during the first decade of the 20th century. In the second decade, which introduced federal-aid highways, the problems of street congestion, promoted in part by high buildings, saw the initiation of zoning. The third decade of business depression saw a consolidation of planning and zoning gains, the creation of a national planning board and the setting up of state planning boards in most of the States. Now at the completion of the fourth decade, when we have a population of some 132,000,000, we have come to the period of the articulation of the various techniques of road location and construction, planning and zoning, to give us the facilities which we need and some of the amenities which, with more leisure and growing discrimination, we are coming to demand.

While the public money spent during the past quarter of a century on construction and maintenance of highways may not be equal to the national debt, it still is a considerable sum, and the people of the United States collectively, through the expenditure of taxes, have acquired a financial interest in these investments which should confer some degree of control of travel conditions on one or more of their governmental agencies. The discovery of the gasoline tax and the automobile license and tax has provided funds beyond the dreams of Midas himself with which to build and maintain highways, but we have not yet made much progress in securing a fair return for our collective investment in high-

ways. We are struggling to find ways in which the owners of abutting property, who have contributed little or nothing to the cost of through highways, may be prevented from confiscating some of the values which the users of highways, who have contributed substantially to their cost, feel that they have in all equity purchased. We are coming to realize that the owners of land along arterial and heavily traveled highways do not necessarily have the right to exploit for private profit the facilities provided by great public expenditures.

In this fifth decade of the 20th century, therefore, let us map out a few of the methods which are coming into vogue by which the people of the United States may secure their money's worth for the expenditures they are making in their public highways. I have sketched the historical development of highway planning and zoning in order that we may proceed to discuss next steps without praise or blame for the past. New conditions have overtaken us so recently and new techniques and governmental practices have developed so rapidly that we should absolve from blame those whose practices we wish to change. Highway transportation has grown in volume and extent faster than we have been able to develop governmental planning control.

We thought that this country was pretty well supplied with rural roads back in 1900. When hard surfacing of various sorts became common, it was generally laid down on existing roads. When the clutter of roadside structures, gasoline pumps and signs and billboards sprang into existence without rhyme, reason or regulation, we naturally addressed ourselves, however feebly, to the problem of the roadsides. Most of the highways carried telegraph and telephone lines. Many of the pioneers had planted roadside trees as a labor of love, and many highways traversed forested regions. But the butcheries of the telephone and telegraph linemen have left tortured and misshapen roadside trees through the length and breadth of our fair land.

Since we had inherited certain public roadside strips of land we thought of our problem in terms of roadsides. First we undertook to clean up the public rights-of-way. In most States no private structure, encroachment or billboard is now permitted within the public right-of-way. But we accepted the location and design of our highways as fairly static. The changes of the last twenty years have taught us better. We know that during the next quarter of a century there will be new highways and relocated old highways on a scale never before dreamed of. So that our problem is not only confined to roadsides, but it must deal fundamentally with the location, design and treatment of highways of various sorts, and the highway must be integrated with the use of the abutting public and private land. In other words, we have it in our power to do constructive and preventive planning as well as to apply the far more costly make-shift remedial measures.

Already many highway departments have on their staffs trained

landscape designers in addition to road engineers, but not always are the landscape designers permitted a voice in the layout and treatment of the highway as a whole. Too often they are permitted to exercise their arts on the all-too-inadequate strip which has been left after the destruction of construction has done its worst!

But it is in the uses of private property along the highway that we have suffered most. Hard surfacing of existing highways or construction of new highways has made every owner of property along the way feel that he has an inherent right to erect buildings and billboards and to conduct roadside business without direction or control. Thus we have thousands of miles of highways used, especially near cities and towns, by four and six lanes of congested traffic, into which there is access from abutting land and from commercial uses at such frequent intervals as to create an acute safety hazard.

What can we do about the admittedly deplorable conditions which exist in and along many of our highways today? What remedies, already put into effect in some places, can we extend for the benefit of the public? What further remedies can we propose?

Our problem concerns new highways and existing highways, planned and zoned districts, and unplanned and unzoned districts.

For new highways it would seem that we might have a free hand to bring about the results we desire. First we have the decisions concerning origin and destination, whether the highway be a federal-aid road or a county or other local road. Then we must know whether it is to be used by mixed traffic or whether it is to be dedicated to pleasure travel. If it be mixed traffic we must know whether the volume will justify immediately or in the future two, four or six lanes. We must know the type of country to be traversed. Beyond the local needs of the communities to be touched, we must know, approximately, the needs of the highway users in the way of roadside facilities. Only then are we in a position to decide the width of rights-of-way, the routing of the highway, and the protections which must be secured and maintained. In securing rights-of-way, a great deal can be done in securing easements from the property owners selling the rights-of-way, and some of the protected highways, such as the approach road to Norris connecting with the Knoxville road, have been secured in this manner. If the highway runs through county-planned and -zoned territory, the use of private property abutting on it may be controlled, and commercial uses may be limited to the recognized needs. The freeway principle by which rights-of-way are secured in the States which have adopted a freeway law makes it possible, where desirable, to secure rights-of-way without conferring any right of access for abutting property. But so far this principle has been limited to actual physical road access. It has not been extended to include access to the sight of highway users. It would seem to a layman that a freeway might be protected from both sorts of access.

Up to the present time, the parkway has been the most successful type of new highway in the matter of very nearly absolute protection; for, with wide rights-of-way, roadside planting can screen any glimpse of undesirable developments on abutting property or open pleasing vistas. At first, most of these parkways were built by counties in districts where dense occupation and high property values made it possible to finance and maintain such luxuries. But the parkways of Westchester County, New York, have become so popular that they have been extended as toll roads into other parts of New England as a part of the provision for caring for through traffic, and the new Merritt Parkway, connecting with the Saw Mill and Henry Hudson Parkways in New York, is now furnishing through connections from New England to points south of New York City with great success. Where parkways are a part of the circulatory system, there seems to be no good reason why they should not profit by sharing in the gasoline tax receipts. This proposal is not new and is in actual effect in some localities. It is not a diversion of gasoline tax money to public expenditures unrelated to facilities especially used by motorists. Undoubtedly parkways will be extended to many thousands of miles in the next few years. States will build parkways to connect their state parks and other scenic attractions. The federal government has already embarked on a parkway program. The Skyline Drive in Shenandoah National Park has been extended south as the Blue Ridge Parkway leading to the Great Smoky Mountains National Park. This, with the Natchez Trace National Parkway, will bring into use more than a thousand miles of federal parkways in the East. Who can suppose that the idea will not spread to other parts of the country, as the protected beauty of these parkways is recognized? Already visitors to the several hundred completed miles of this scenic parkway along the Appalachians have outnumbered visitors to any other national park and the enthusiastic comments of western as well as eastern motorists are an indication of the demands of the future. These parkways will usually be freeways, in so far as the control of access is concerned. They usually traverse scenic areas in which protection is more important than new planting. But they are little concerned with the control of private property along the way, because the land to be seen from the driveway is usually in public ownership or can be planted out of sight of users of the parkway.

But we have already in the United States 3,000,000 miles of rural roads. Except for the parkways, the so-called federal highways are really federal-aid state roads. On these existing highways, there are those who believe that ultimately we can control the uses of private property abutting on them through county planning and zoning. Ten years ago, the then American Civic Association called a conference of representatives of other organizations and public officials to discuss with its own members methods of what we then called roadside control.

Some of us thought that the State which pooled such extensive tax moneys with the federal-aid moneys should have something to say about the use of private property along its improved highways. We proposed to give the State some authority to control the use of such private property. But our friends, the planners, said, "No, that is strip zoning and so is iniquitous. Nothing short of comprehensive zoning of a complete district is sound. Let us work for county zoning and this will be our answer." Well, we worked and waited ten years. During that time some thirty counties have been zoned more or less comprehensively. We are glad that this has been accomplished. But when we contemplate that there are three thousand-odd counties in the United States, all of them furnished with some sorts of roads, and many of them traversed by important state and national highways, it is a little discouraging to estimate that at the present rate of progress it would take a thousand years to complete the zoning of the counties of the United States. Even if the rate of progress were to be considerably accelerated there seems little prospect that we can depend exclusively on county planning and zoning to control in the interests of the public and the highway users (almost synonymous terms) the private property along public highways. Out of this discouraging situation has arisen a fairly widespread and insistent demand for some sort of state action to bring into line the control of the uses of abutting private property which directly affect the use of the highway.

Mr. Alfred Bettman has drawn up an elaborate proposed measure which not only establishes a method of control, but sets up in the state act itself the principles and objectives which are often incorporated into regulations under an enabling Act. Generally speaking, the enactment of such a law would seem to be too good to be true. Whether legislatures can be induced to pass a ten- or fifteen-page act dealing in so much detail with the establishment of public authority over private property in unaccustomed ways may be doubted. On one matter, Mr. Bettman's proposed act would actually be retrogression. He includes a paragraph, no doubt aimed at lessening opposition, stating that "outdoor advertising shall not be excluded from business or industrial districts, provided, however, that the (Highway) Commission may regulate the sizes and locations of such advertising within such districts." At the present time, while billboards are permitted in most city commercial and industrial districts, they are excluded from decentralized commercial districts in the Montgomery County, Maryland, area under the jurisdiction of the Maryland-National Capital Park and Planning Commission, the enabling legislation for which was drawn by Mr. Bettman. This precedent seems to many of us one that might well be followed in the setting up of small commercial areas along rural highways. These could with propriety be restricted commercial areas, with specified types of business permitted or excluded. The situation may be somewhat different in the

approach highways to cities, but undoubtedly the time will come when cities and counties will coöperate to give to the metropolitan area approach roads of which the community may be proud. When that day comes, can anyone doubt that billboards will be banned, signs restricted in number and size? Already there is considerable competition among oil companies to provide attractive filling stations. This may lead to a wider observance of the amenities on the part of all commercial institutions bidding for business along the rural highways.

The act proposed by Mr. Bettman has the same objective, and in the main the same procedures, as those proposed by the American Planning and Civic Association. To some degree this is true of the measure recommended by the Committee on Roadside Development and Control of the American Automobile Association. In all three, the state highway commission would be charged with the authority for zoning or designating the uses to which private property abutting on public highways may be put. The Civic Association's proposed measure was in agreement with Mr. Bettman's suggested act in requiring that the highway commission act after consultation with the state planning board, if any. The proposed bills of both the Civic Association and the Automobile Association were efforts to simplify the enabling act in the interest of securing its passage. They provide for setting up protective areas on each side of the highway and for designating commercial areas. In the final form both took account of existing built-up areas, but left it to the discretion of the highway commission, with the advice of the planning board, to continue or not to continue these areas as commercial districts. Both recognized the desirability for comprehensive county zoning and the right of the county and the city to make greater restrictions than those in effect by the State.

There has been some discussion as to whether the state highway commission should be placed in charge of zoning or controlling the uses of private property only along the state highways or whether this authority should extend to all highways outside of incorporated cities and towns throughout the State. The reason for limiting the authority to the land along state highways was that here obviously the State was expending funds and conferring benefits for which in equitable return certain compensating restrictions might be set up. The justification for extending the authority to all rural roads is that county roads need the protection as much as state roads and the motorist is hardly conscious when passing from one to the other. A further legal justification may be found in the fact that the State does actually contribute funds to many county highways.

There are those who believe that the control of strips along the highways by the State should not be called zoning. This is a legal question not easily settled by laymen. Whether called zoning or control through the police power, an increasing number of citizens is demanding

that the State step in to protect its expenditures in highways and give to highway users a greater degree of safety, comfort and pleasure.

Many existing highways were at first in use for a comparatively limited volume of traffic. As through traffic increased and residence neighborhoods extended into the rural country outside of cities, highway widening has been needed. At first this took the form of added lanes of pavement, sometimes separated in the middle, sometimes not. More recently, where the access problem has become aggravated, service streets, entirely separated from the through travel lanes, have been built to provide property access. Usually this required securing a wider right-of-way and the plan could be used only when the land was comparatively open or the set-backs sufficient to permit the building of the service roads.

This principle has been used to advantage in the building of new highways. When freeways or parkways are built, it can be applied, or, as frequently occurs in Westchester County, the service road is entirely unconnected with the parkway which borders the rear of residential property facing on another street.

In summary we may list the items of legislation and administrative practice by which a State may measure its progress toward provision of facilities and amenities which serve its population and attract some part of the great pleasure traffic the provision for which directly and indirectly is fast advancing to first place among the industries of America.

1. Adequate landscape advice on the staffs of state and county highway agencies, utilized from the inception of new highways, and applied in the treatment and maintenance of the rural highways.
2. Close coöperation between state and county highway agencies with state and county planning agencies to the end of articulating highway design with present and future land uses.
3. State legislation authorizing or requiring county planning and zoning,
 authorizing construction of freeways,
 authorizing use of gasoline tax for construction and maintenance of parkways which contribute to the motorway circulation system of the State;
 authorizing state highway commissions, with the advice and approval of state planning boards, to control the use of private property abutting on rural highways, in the interest of the safety, convenience and pleasure of highway users;
 directing license of billboard companies and taxation of billboards. (This in the interest of orderly procedure with the expectation that billboards will be reduced, but without hope that they can be eliminated from any considerable areas or confined to highly commercial districts.)
4. The exercise of county zoning which should give a comprehensive plan and zoning districting to the county on which all new highway plans could be based and which would dictate changes in location, treatment and use of existing highways to provide for articulated highway and land use.
5. The provision for state and county parkways, where appropriate, to be financed from gasoline tax supplemented when a part of the State's highways system by federal aid.
6. The extension of the freeway principle to appropriate new through highways and in modification of existing highways where through traffic and local access interfere with each other and add to the hazards of the road.
7. The extension, as rapidly as possible, of comprehensive planning and zoning for counties by which commercial and industrial uses may be limited to public convenience and all other rural land along the highways protected from such uses. The application of some plan by which non-conforming uses may ultimately be brought to an end.

With all these methods put to full use, with federal parkways supplementing state activities and with an increased vigilance on the part of cities to provide adequate arterial entrances within their borders and to protect suburban residential and commercial areas from unsightly structures, the time may not be far distant when motorists may travel from one end of the United States to the other without being offended by the man-created ugliness which has replaced the native landscape and the pastoral beauty of farm homes and fields. Within city limits there is no reason why tree-lined parkways and boulevards should not continue the rural parkways and through highways directly into the business centers.

Many citizen organizations have carried on educational campaigns to bring about such a consummation. The American Civic Association, under the leadership of Dr. J. Horace McFarland, was a pioneer. The National Roadside Council, under the able leadership of Mr. and Mrs. W. L. Lawton and Mr. Albert Bard, has made a signal contribution to the cause, and through the coöperation of the American Nature Association has been enabled to reach a wide public. The Garden Club of America, the National Council of State Garden Clubs, the General Federation of Women's Clubs have all carried on active programs. In the last few years, the American Automobile Association has had a Committee on Roadside Development and Control which should enlist valuable cohorts to bring about suggested changes in legislation and practice in the States. Since 1935, due to a gift from Mrs. John D. Rockefeller, Jr., the American Planning and Civic Association has been enabled to work through its legal counsel, Flavel Shurtleff, in the drafting of suggested legislation and in close coöperation with groups in many States who are struggling to protect the remnant of our native scenery which remains intact and to protect highway travelers from the iniquitous ugliness and squalor which has followed closely on the public expenditure of funds for so-called highway improvement.

We commend the programs advocated by these lay organizations to the official planners, engineers and consultants, to the members of highway commissions and planning boards, to the state legislators and administrators, to the county supervisors and municipal authorities, for we believe with the public opinion generated by these organizations and citizens at large, legislative and administrative officials may act with impunity to bring about practical improvements in highways and adjacent areas.

Architectural Control in America

A PAPER READ AT THE NATIONAL CONFERENCE ON PLANNING, SAN FRANCISCO, JULY 8–11, 1940

CHARLES H. CHENEY, Palos Verdes, Calif., Secretary, Palos Verdes Architectural Board and Art Jury

GOOD architecture and attractive neighborhoods, gardens and landscaping are what make a city worth while. They comprise the most important amenities—the niceties or attractions of environment—that give life satisfaction. Everything else is secondary. The measure of them is largely the measure of a city.

How can we obtain these values? Architectural control is the only method so far discovered to insure them in new buildings. To enforce architectural control competently requires establishment of an architectural board of review to pass on all plans of buildings, signs and other improvements at the time the usual building permit is applied for. Where a majority of this board are trained architects and they are given legal veto over the design, color and location of the structure on the property, they can obtain results of permanent value. For seventeen years I have served on such a board.

Is San Francisco still only 11 percent of a city? Or has the percentage of good architecture and good environment increased here? Has it done anything constructive to better its situation; established architectural control over new buildings?

Should we now rate San Francisco 12 percent, as we once did Los Angeles and New York, or only 8 percent, like Chicago? Some of you will remember the interesting appraisals of the more important cities of the United States made in 1927, and presented in that year at a joint session of the old National Conference on City Planning and the American Institute of Architects. Those figures were widely published and discussed. Additional figures were presented the next year at the meeting in Dallas, Texas.[1]

Will those of you who read or hear this paper, look around when you go home and try to evaluate your cities? It is a sad commentary on our present civilization that in general 80 to 90 percent of the buildings in American cities are ugly and badly designed. Many are also so repulsive in color and so lacking in any softening and refreshing grace of planting that even a considerable number of structures of good design among them cannot offset the distressing effect of the bad ones. The impression of the whole is dominated by the bad examples.

Deteriorated neighborhoods, blighted districts, cause an enormous economic loss.

[1] "Progress in Architectural Control," Washington, 1927; and "Building for Permanency," Dallas, 1928. Published in the Proceedings of the National Conference on City Planning.

Lack of architectural control is the greatest single cause of these conditions—greater even than obsolescence. In fact, it promotes obsolescence!

Worse still is the unhappy, stilted, ugly environmental condition produced for the unfortunate people who must live there. And they constitute more than four-fifths of us all! The condition is mentally unhealthful and economically and socially unsound for the nation.[1]

Signs and billboards are the commercialized vice of architecture, as pointed out in a recent article.[2]

Shall we permit large, off-color, "shouting" signs, or shall we try to hold to reasonably proportioned "directional" signs only, of a color harmonizing with the neighborhood? This subject is discussed in the preceding paper by Miss Harlean James. All honor to this veteran worker for civic betterment. In a lifetime of planning I know of no other lay person who has obtained so many real amenities for city, state or nation.

Have any experiments been made in actual architectural control? If so, where, and how have they worked out?

San Francisco itself offers one example—St. Francis Wood, undoubtedly one of the most perfect home neighborhoods of America. We rate it 95 percent. Every visitor to this Conference should see its 300 acres of development—one of the best this country has to offer in planning and architectural control. It is located west of Twin Peaks and designed and planted by Olmsted Brothers, landscape architects. Here was set up a comprehensive scheme of protective restrictions, requiring approval by an architectural committee of the local homes association of the plans of all buildings before construction. The excellent results are clear to see. The directors of the homes association would probably be glad to talk to you about it.

There are a number of other notable residential neighborhoods in the country where architectural control has been totally or partially exercised with good effect. The best known are the Roland Park-Homeland-Guildford section of Baltimore, Forest Hills Gardens on Long Island, the Country Club District in Kansas City, and several in the Los Angeles area—Palos Verdes Estates, Cerritos Park in Long Beach, Emerald Bay in Laguna, and the Rancho Santa Fe, a small farm area near San Diego. All of these have, I believe, the advantage of fully competent boards of review, a majority of whom in each case must be trained architects who can read plans and visualize the proposed building as it will look when erected on the site. They operate by virtue of protective deed restrictions, by mutual contract between all the property

[1] "A Brief for Architectural Control," by H. B. Brainerd in the March-April, 1938, *Planner's Journal*, and "Aesthetics and Zoning," by T. W. Mackesey in the Oct.-Dec., 1939 number of the same magazine present valuable material on the subject.

[2] "Architectural Control," published in the *Octagon*, Journal of the A. I. A., March, 1940.

owners of their area. There are court decisions sustaining such powers where the restrictions have been properly drawn. The control is complete and effective.

Cities or counties seeking to inaugurate architectural control under the police power are in a different position, with more limited precedent. The beginning made at Santa Barbara in 1925, and the piecemeal work of planning commissions in San Diego, Sacramento and in the counties of Monterey, San Mateo, etc., in this State, and in New Orleans, Charleston, and a few other eastern cities are a recognition of the problem. Yet at best they are only halfway measures.

The greatest problem of cities. Heretofore planners have been too occupied with trying to bring a little order out of our mussed-up cities to give serious attention to architecture. Buildings are the most conspicuous, the most intimate, continuously used and observed part of every city. Just as the trees in the forest make the forest, so the houses of a city make a city.

Architecture means to the average person, all buildings—whether good, bad or indifferent. Some architects are still trying to argue that only structures of good design should be called architecture; and some of them still battle about the term "architectural control," used by planners to designate the growing movement for the establishment of architectural boards of review. On the whole the help of the architects can be counted upon and should be drawn in for service on the boards. Few other people are able to read plans sufficiently well to be sure of what they mean.

The term "architectural control" has now been used internationally for more than twenty years and it does not seem likely to be changed. For it expresses the handling of one of the world's greatest problems, common to cities of other countries as well as our own. It was my privilege to be a member for several years of the Committee on Architectural Control of the International Federation for Housing and Town Planning. The many bulletins brought out between 1926 and 1934 give the illuminating experience of many different countries which have been trying to find an answer to this serious problem. Some ingenious methods have been employed, but all these efforts bog down unless competent enforcement is established.

The most notable forward step for architectural control in this country has been taken by the Federal Housing Administration. It insures an increasing number of mortgage loans made by banks to finance new construction. Once the financiers of America really understand the serious depreciation caused to owner or lender, not only by a badly designed building, but also by an unattractive, off-color neighborhood, the evil is bound to be stopped as far as possible at its source.

FHA is a sound business institution risking no avoidable error. It takes two precautions. It exercises its own architectural control on the

plans that come before it for financing. Also it carefully appraises the amenities of the neighborhood where the proposed structure will be located. If the neighborhood has much bad architecture or is otherwise unattractive or lacking in amenities and conveniences, the loan is reduced accordingly. Many neighborhoods cannot get loans, particularly in the old and deteriorated districts or where the zoning is faulty.

Such procedure is already having a marked effect on lenders who do not take out FHA insurance and, of course, on the development of cities where FHA operates on a large scale. This is true in Los Angeles and many other California communities. The process is slow. Cities desirous of stopping any considerable part of bad architecture in new structures will have to set up architectural boards of review under the police power, to pass on all plans for which building permits are sought.

That cities and counties have the right to exercise architectural control for the general welfare, under the police power granted by the Constitution of the United States, and by most of the States, there is little doubt. The courts have been leaning more in that direction, though we have no clear-cut decision on it as yet.

Some of you will remember that the situation was much the same with zoning twenty-five years ago. We had to feel our way, be cautious about contests or causes of contests until we could show the courts that we had tried zoning and that it worked. It is only twenty-five years ago that we ventured to establish the first single-family dwelling zones, protected from the invasion of apartments and multiple dwellings. Seven years later such an ordinance was upheld by the United States Supreme Court for the first time.

Reasonableness is about the only limit on the use of the police power by public bodies, the courts have held. It is only reasonable then that the great economic and social evils in urban amenities and their public regulation through architectural control should soon be recognized and fully sustained by the highest courts.

There are dangerous tendencies in the present trend of enforcement that may not only discredit but even prejudice the courts. Planning commissions are not qualified nor properly constituted to act as architectural boards of review. They seldom have more than one member who can read the plans presented to them. If they accept the responsibility now being placed upon them by some zoning ordinances they have to depend upon some draftsman to look over the plans, to consult with designers or owners about them, and to advise the board for action. This is a left-handed and weak method, and can hardly have the respect and confidence of the architects and designers who make the plans. Their coöperation is essential to any proper degree of enforcement.

The alternative is for the commissions to set up competent architectural boards of review, first in an advisory capacity if necessary, but with official and established status as soon as possible.

The Santa Barbara ordinance of 1925 (later repealed), establishing a thoroughly competent architectural board of review, is probably the best of the halfway measures so far attempted. It was published in full in the proceedings of the National Conference on City Planning, Washington, 1927.

So serious and far-reaching is this problem that the following resolution for bringing in further reports to this Conference is requested, to establish, as soon as possible, a standing committee of five members, to serve for three years, for the purpose of gathering data on the cost to property owners and the public, of the lack of architectural control, and to bring to public attention all constructive methods for its establishment, operation and maintenance, and to report from time to time thereon to this Conference.

IN THE CITIES AND TOWNS

EDITOR'S NOTE.—Five of the papers in this section were presented at the National Conference on Planning, at San Francisco, July 8–11, 1940. Dr. Neasham's paper on four Spanish cities in the United States grew out of the National Park Conference at Santa Fe in 1939. Let us hope that 20th century planning will not destroy or injure the Spanish heritage of these cities which dot the Spanish frontier from the Atlantic to the Pacific.

City Planning and Housing—May They Meet Again

TRACY B. AUGER, Norris, Tenn., Department of Regional Planning Studies, Tennessee Valley Authority

THIS paper rests on the simple thesis that city planning is the public's business. It is for public enterprise, not private enterprise, to say where cities shall be located, in what directions they shall grow, what their internal structure shall be. The rôle of private enterprise in building up the physical structure of the city, must be played within this publicly determined framework.

City planning has failed in the past because the rôles of public and private enterprise have been reversed. Private initiative has located cities and determined the direction and character of their growth, leaving to public enterprise the job of following along with streets, utilities and public services as best it might.

Just as the modern housing movement has for the first time acknowledged public responsibility toward the provision of adequate shelter, and divided the housing field between public and private enterprise on lines appropriate to their respective purposes, so in city planning there must be acknowledgment of the dominent public interest in the form which the Nation's urban life assumes. Only then can housing and city planning meet on an effective basis.

Those of you who attended the planning conference at Buffalo eleven years ago will remember that the relationship between city planning and housing was eloquently treated on that occasion by our esteemed confrère Harold Buttenheim, in his dramatic treatise "Where City Planning and Housing Meet." Turning for inspiration to his pre-stock-crash prophecies, I have found this choice, salutatory tidbit: "City planning and housing meet so constantly and embrace each other so intimately as to make holy matrimony their only proper status." That statement, lifted from its context, leaves one in doubt whether Harold was offering an honorable proposal or expressing the shot-gun opinion of an outraged parent. Could the birth of Radburn perhaps have led him to issue an abrupt ultimatum? Later passages in his paper, however, dispel all misgivings, and in the closing peroration one finds his true benevolence full blown. "Is it too much to hope," he asks, "that, joined

in holy wedlock, these two great forces of human welfare may give birth to new and vigorous movements for making life more livable in American cities?"

The question to which we now address ourselves in retrospect is—Was it? Was it too much to hope that city planning and housing would join in a happy and productive union? A galloping poll of professional opinion reveals divergent views. Some say that when city planning lost its money in the stock crash, housing became coolly indifferent and set out on a professional career of her own. Others assert that there have been irregular meetings since that time, and claim to see strong resemblances to both in the three little Greenbelt towns. Still others admonish us to beware of malicious gossip, and say that city planning and housing were respectably married at the Buffalo Conference by Father Buttenheim himself, and have been living quietly together ever since in the Congressional Library.

Whatever the historic facts may be, it must be admitted that these two great forces of human welfare have not yet produced a new race of cities, nor made life substantially more livable in the old ones. The principal force operating to make cities what they are today is still the same force that operated so high, wide and handsome before 1929, the force of free private enterprise, unfettered by any effective guidance or control in the public interest. Neither city planning, as a directive social force determining the forms of cities, nor housing, as a force for the improvement of the basic environment of city living, has materially changed the lot of the mass of urban citizens during the past decade.

The reason for this lack of progress is found, I think, not in housing but in our obsolescent attitudes toward city planning. We have persisted in clinging to the old concept, born of village days, that cities are mere agglomerations of free private interests, to be planned accordingly, and have refused to face the reality of the complicated modern urban organism. The service which the modern city renders is a community service, rendered by the city as a city and not by its citizens as individuals. The planning of cities in a way which will enable them to render this service is a public responsibility. Yet we have based our city planning on the old village concept, preferring to approach the goal along the familiar paths of private enterprise rather than follow the less charted course of public enterprise.

There is a place for private enterprise and a place for public enterprise in the planning and building of cities. Each is geared to perform a valuable and necessary service, but the rôles which they are fitted to play are different, and not interchangeable. The urban conditions which are now so universally deplored are largely due to incorrect assignments of these rôles in the past, and will only be corrected by a courageous reassignment in the light of today's facts and needs. Any such reassessment of the functions of public and private enterprise will result

in a substantial reversal of the rôles previously placed, and establish the public interest as the sole arbiter of the form which cities shall assume. We have given lip service to this idea for many years, but in practice private initiative has determined where new cities should be located, in what directions they should grow, and what form their growth and development should take. Even in cities like Cincinnati, where some of our best measures of public direction and control have been applied, the actual effect on the determination of the city's form has been almost negligible.

The American people have heretofore been unwilling to assign to government the rôle of really governing the processes of urban growth. So we are where we are. And here we shall remain until we are willing to reverse our thinking and give to government, not private initiative, the power to determine how cities shall develop. It is essentially a public responsibility to say where cities shall be located, how big they shall be, what form they shall take, and what the basic plan of development shall be. Only within such a framework can private enterprise properly carry on the planning and construction of private buildings and development that contribute to a sound urban structure.

It is only too apparent what the previous reversal of these assignments has brought—city growth largely fashioned by the urge of land speculation, with public enterprise left to fill in as best it could, building and rebuilding streets in a vain effort to serve uncontrolled private development, carving needed school and recreation areas out of expensive land, expanding, scrapping, reorganizing public services to meet unpredictable demands. It is no wonder that most cities have gone bankrupt in the process and have little to show for the enormous expenditures that both public and private enterprise have made under an impossible division of the field. Have we the good sense as a nation to look behind the wreckage, and from its lessons derive new procedures for urban development in which we will assign to public enterprise the tasks that are public and to private enterprise those that are private, and let both do the jobs for which they are best fitted in the interest of the general good?

One answer to this question has recently been published over the names of an eminent Committee of the United States Chamber of Commerce, whose authority to speak for private enterprise can scarcely be questioned. There is much that is sound and progressive in their analyses and recommendations, but the general tenor of their report fits into the old groove, with private enterprise given the initiative in city planning and development, and public enterprise left in the rôle of benevolent big brother to aid and abet the process. Entitled simply "Improvement of Housing in Cities," the report opens with fine disregard for its conclusions by showing what private enterprise has done to American cityhood in the past. Picking St. Louis as a typical example,

it portrays the area of that city as five to ten percent in need of total reconstruction, fifty to sixty percent in need of rehabilitation, and the remainder good only if it can secure adequate public protection to keep it from following the older sections down the primrose path to slumdom. This frank appraisal of present-day conditions, with which I am sure we would all substantially agree, is followed by the interesting conclusion that the way to escape the current situation is to follow the very course that led into it, and leave the regeneration of our cities in the hands of private enterprise, unshamed by the sight of public housing projects that have lately set new standards of urban decency.

Pondering the logic of that argument as I first read the report, I found myself reminded of an old refrain, and fancied that I saw, dimly as through a veil of soft coal smoke, old Dame City herself, crouched on her blighted areas and singing to the sweet memory of Private Enterprise the ditty that begins, "You made me what I am today, I hope you're satisfied!"

"You made me what I am today
I hope you're satisfied?
You dragged and dragged me down until
My soul within me died.

"You shattered each and every dream,
You fooled me from the start.
Although you're not true, may God bless you,
That's the curse of an aching heart."

It seems strange that a group of eminent Americans, each of whom has had unusually rich experience with the forces that have built our cities, should ask us to turn back to the old processes of private enterprise for urban regeneration; to that same private enterprise that has built our slums, brought untimely blight upon our homes, created congestion in our streets and despoiled our countryside with surplus subdivisions! It is strange, and yet it is fairly typical of the wishful thinking in which we all indulge, thinking which has led us, with cities steadily becoming more and more of worse and worse about us, to hope that the way out of the difficulty might be some happy variant of the way in, and that the forces that year after year have relentlessly been making cities worse might somehow be depended on to make them better.

At the risk of being charged with high treason to the American Way, I make bold to assert that the way out is in fact the opposite of the way in. We will never have cities that are really fit to live in until we recognize that their formation is a public responsibility and not a private one, that the rôle of private enterprise must be at all times subservient to the general good of the community at large, and that the formulation of the general framework in which private effort fits is essentially a matter for public enterprise to tackle. We have not had effective city planning

in the past because we have never actually admitted this prime prerequisite.

We have been prone to make the decisions which shape the destiny of cities on the basis of what were essentially private interests, often clothing them with a false glamor of presumed public good to salve our consciences. Streets were widened because otherwise "the public"would be inconvenienced in reaching downtown shops. New arteries were opened to the suburbs in order that "the public" might enjoy the bright new subdivisions that awaited it there. Or, according to the modern cry, the outward trend of population is to be discouraged and central areas rehabilitated, lest "the public," forsooth, lose the tax revenues based on the exploitation of central properties. "The public" has become a shibboleth to pass all sorts of plans, while the real good of the real public, the people who live and make their living in the cities, is forgotten. Instead of planning cities with the sole objective of producing a fitting environment for modern life and work, we have planned them to meet a hodgepodge of competing private interests, and then have perforce set up a few so-called city planning measures to ameliorate the worst abuses against the public weal. Even the name city planning has become associated with a set of stop-gap measures devised by a harassed public for its protection, rather than with a constructive procedure for bringing well-planned cities into being. We never have, we never will, secure decent cities through that sort of city planning.

When, during the lush spring of 1929, Harold Buttenheim spoke of the marriage of city planning and housing, he doubtless spoke in the vernacular of that day, of private housing occasionally perfumed with the public interest, of city planning redolent with private interests, and with an optimism invigorated by that hopeful event ,the building of Radburn by a private corporation really devoted to the public good. In this harsher era of 1940, let us realistically consider what might result from a union of city planning and housing both thoroughly imbued with the public interest.

The Housing Authority of the capital of Georgia gives a cue in its recently issued report "Rebuilding Atlanta." In text and illustration that report shows how the present and proposed housing projects in that city are beginning to transform the blighted areas into a series of attractive residential neighborhoods. If one's imagination is in good working order, he can picture the city actually rebuilt according to a modern pattern that recognizes the principle of residential cells, each planned as a neighborhood unit complete with its own school and shops and social facilities, and separated by the arteries that carry the lifeblood of traffic between them. With some extra oiling, the imagination may even carry this picture further, and envision outlying satellite communities built to a cellular pattern, fixed in general outlines by the public in the sole interest of a healthy and efficient community.

Free use of the imagination is very necessary in conjuring up this picture because neither in Atlanta nor in any other American city has such a wholesale rehabilitation actually taken place or been seriously projected. There is a great deal of progressive housing in evidence about the country but little evidence of progressive city planning to go with it. In fact, one cannot always be certain that the two have been on speaking terms of late. To all appearances, housing has set forth rather vigorously on her new-found career and has not felt the companionship of city planning essential to her happiness.

I would not be so unchivalrous as to suggest that she should have waited for city planning to come along. Rather, I am inclined to place the blame on city planning for being left so far behind. What we have witnessed in the past few years is an acknowledgment of the public responsibility toward housing, without any similar recognition of the public responsibility toward city planning. And so we find in the more extensive housing projects, and in such prospectuses as the Atlanta report, a glimpse of what might be, rather than a sample of what ought to be, a glimpse of housing projects planned and built in the public interest but warped into cities whose form has been set by a collection of unguided and uncontrolled private interests often working at cross purposes. Only in the Greenbelt towns and a few special communities like Norris do we find both city planning and housing dominated by the public interest throughout a whole community.

Outside of these few communities I know of no case where a recent housing project, public or private, has been planned and built as a complete neighborhood unit, well organized internally and in its relationship to the surrounding city. Even in so pretentious a development as Parkchester, latest and justly famed pride of private enterprise, the careful internal planning of the project merely serves to heighten the contrast with its surroundings, and advertises to all and sundry that it is a misfit in the pattern of the New York metropolis. For private housing in that case ran up against the same snags that have beset public housing, the inability to carve out of an existing city a site wholly appropriate to the building of a new neighborhood. The fragments of old city that stick to Parkchester's gleaming sides like barnacles, the haphazard and wholly inadequate provision for the schooling and recreation of its residents, and the nonchalance of its setting in the city's transportation network, all give it the same stamp of imperfection that marks the recent large-scale projects in public housing. The experience of this multi-million-dollar private venture merely bears out the experience of the multi-million-dollar public program, that so long as diverse private interests control the basic plans of cities, the best of large-scale housing, under whatever auspices, must fall far short of accomplishing any real rehabilitation of the city structure.

The very great advances that have been made in housing, both

public and private, during recent years stem from the new realization of public responsibility in that field. Whether public projects are built for those sectors of the population which private enterprise is unable to serve, or private projects are built for the higher income groups under the aid and stimulus of governmental programs, the recognition of the public interest is clear, and a sane and workable division of the field between public and private enterprise has resulted. We have but to go back a very few years to see the contrast with the preceding era, when private enterprise ran the whole housing show, and house owners, the cities to whom they owed their taxes and the banks that loaned them money all went gloriously broke together.

I am not unmindful of the few exceptions that shone like beacons in that era, of Forest Hills Gardens, Radburn, Chatham Village and other private ventures which served to point the way. Nor am I unmindful of the previous era of public housing during World War I, when some of our best early examples of well planned projects were constructed. The present era could not have come about without those pioneerings, but it is a new era because as a Nation we have finally come to insist that those pioneers be followed, and that housing henceforth take its cue from their example rather than from the great mass of bad housing that was typical of their time.

In city planning, as in housing, the time for the new era has arrived. Here, too, some of the most valued pioneering has been done by private enterprise. The garden cities of England, the finest examples yet produced of towns built to a soundly conceived basic pattern, were planned and built by private interests, as was our own trail blazer on this side of the Atlantic, the town of Radburn. In these communities, sites were selected, the size and form of the community determined, and the basic plans prepared solely in the public interest, thus setting an example for public enterprise to follow. In the garden cities, the proper rôle of private enterprise was also demonstrated in the planning and construction of various properties within the established town framework.

No better proof of the basic public interest in the forms of cities could be found than that which now comes to us from Europe. Perhaps the booming of cannon will prove more persuasive than the booming of real estate, the new threat of destruction from without may be more persuasive than the old evidence of disintegration from within. The sheer vulnerability of great cities may force us as a matter of public policy to decentralize into communities of less tempting bulk. Concentrations of manufactures may have to be dispersed into areas harder for bombers and artillery to find. When we are faced with the threat of invasion we can see that the location of cities within our borders, their size and their internal structure are all matters of vital national concern. Would that we could have seen that fact as well without the threat of war to clear our lazy vision.

It is sad comfort that a low building density which decreases the chances of being hit by bombs also provides open spaces for sunlight and for play. The parks and gardens that give our buildings a four to one chance of escaping demolition, likewise increase our chances of survival under the more normal processes of city life. If we are forced to build fire-resisting houses, arranged in neighborhood cells with belts of open space between, in order to parry the threat of conflagration, may there be some comfort in the thought that the same device will promote a better organization of peacetime city life. And if perchance the very horror of the thought of New York, Chicago or San Francisco subjected to a rain of shells impels us to a redistribution of these overgrown metropolises on some saner pattern, let not the tears that we may shed over the loss of long cherished bigness wholly blot our vision to the fact that war will thus have served at least one constructive purpose.

Whether our cities are in fact faced with the unaccustomed blight of war or the customary blights of peace, we can no longer overlook the fact that their future is the public's business. Two-thirds of our people live in them, most of our industrial production takes place in them, the minds and the materials of the Nation are formed in them. It is a risk no modern Nation can afford to take, to leave the determination of its urban structure to the hit-or-miss processes of individual enterprise. Let's freely admit that we do not at the moment have the governmental machinery to meet this challenge. We do not have machinery at the Federal level which can guide the location of industrial centers in the national interest. We do not have machinery at the state level that can guide the urban patterning of the States. We do not even have machinery at the urban level adequately to direct and control the development of individual communities.

Not so very long ago we were woefully deficient in the machinery of military preparation, but we are now embarked on a most extensive program for securing it and putting it to work. The machinery of government is not fabricated quite as easily as the machinery of industrial production, but its creation is not a hopeless task. There was little governmental machinery for tackling the housing problem seven years ago. There is a great deal today, and while there is still some healthy controversy about its proper functioning, the same might be said of radio or television. If there is such a thing as an American Way, it is epitomized in our ability to devise the machinery we need to meet our problems, and that is as true of the machinery of government as it is of the machinery of private endeavor.

Suppose that it should cost twenty billion dollars to provide public housing for the families that need it, as our Chamber of Commerce Committee estimates with such obvious alarm? What if it should cost a hundred billions more of private funds to complete the process and really put the Nation's cities on a modern footing? What young person

would not mortgage his future for a decent home? This is still a young Nation and can easily afford whatever mortgaging of our public and private futures may be needed to secure a decent environment for living. Personally, being neither a banker nor an economist, I think all this grave talk about mortgaging our future to pay for housing and urban rehabilitation is pure bunk. The money will be spent in any case, whether we build well or poorly. The only thing that need concern us is that we get our money's worth. We never have, and the country still manages to get along. How much better a country it could be if we spent our money wisely!

So, to conclude on the note with which we started, let me engage in some speculation about the union of housing and city planning. I suspect that housing has gone out into the world, acquired an education and generally improved herself since Harold Buttenheim found her in the embrace of city planning eleven years ago. My advice to the young man is, in case you see him anywhere about these corridors, go out and do likewise. Make yourself worthy of the young lady's continuing affection, and you may find her ready to blend her career with yours. And don't be sparing with the children.

What is Happening to our Central Business Districts?

JOHN R. FUGARD, Chicago, Ill., representing The American Institute of Architects and The National Association of Building Owners and Managers

IT IS not without considerable hesitation that I have undertaken a discussion of subjects so vital to metropolitan and urban America.

All thinking people recognize that something is happening to central business districts; perhaps they are just now aware of those happenings, but few are cognizant of the causes and effects, and fewer people can foresee the predictable future.

Shifts of population, gradual and somewhat insignificant numerically at the inception, yet gaining momentum over the past two decades, have caused great areas of our cities to become almost depopulated, most evident in those areas surrounding central business districts, and demonstrated by the establishment of decentralized business communities.

This process of decentralization has been in progress for over twenty years, and population shift, as a part of this process, is due in large part to the automobile, improved bus lines, faster suburban rail transportation, and the breakdown of tax assessing and collecting agencies of local government. The process has been accelerated by rapidly mounting urban taxes, taxpayers' strikes, and the failure of public servants to perform their duties, for it is a known fact that the cost of municipal,

and other governments as well, never grows less, and this cost must be met by the taxpayer who actually pays taxes. The entire burden falls on his shoulders, not only in carrying his share of the burden, but also the share of those who do not pay property taxes. When an owner is unable or unwilling to pay taxes in return for municipal services, his property is allowed to deteriorate, and the start of a blighted area is under way.

The refusal of financial institutions to look beyond the present and to lend aid in stopping or overcoming blight has further hastened this process of decentralization. One wonders to what extent cities must be depopulated and property values shrink and disappear before the money lender takes a realistic view of the situation and interests himself in the solution of the problem, and we speculate upon the extent of damage to our cities which must be manifest before our local statesmen think in terms of service to the people rather than in terms of service to their parties.

While central business districts connote office buildings, hotels, banks, municipal government headquarters, and commercial institutions, all of which suffer through the process of decentralization, perhaps the chief suffering class is that of the office building. Yet an analysis of individual structures will prove that those intelligently conceived, properly planned, sensibly financed, and well managed, have come through the last decade with a fair record of occupancy, and with some measure of earnings for investors, which should increase as times goes on.

However, many of our outstanding office building structures built in the "golden twenties" were doomed at the start to failure, as the result of poor planning and over-financing through overcapitalization by the greedy money lender.

While the decade of 1920 to 1930 showed a vast expansion in office space, the first three years of the 1930's showed a vacancy record mounting from 11 percent to 27 percent. From that time until 1937 about half the vacancy was absorbed, and since that time fairly stable occupancy has maintained.

The rental survey of the National Association of Building Owners and Managers shows an approximate present occupancy of 83 percent for office buildings in 106 representative cities.

In spite of mounting taxes which now take approximately 26 percent of gross income from metropolitan office buildings, an increase of nearly 8 percent over ten years ago, yet earnings are slowly increasing due to several factors: the elimination of useless and obsolete buildings, and the conversion of these areas into parking spaces, thus affording better light and air to the remaining buildings, and providing better transportation facilities for the private automobile; the growing movement to interest tax assessors in giving consideration to earning power rather

than basing all tax assessment upon a fictitious brick and mortar value; and a slowly increasing improvement in general business conditions.

A really intelligent planning of downtown parking areas can result in real aid to all central business structures, not only in appearance but also in accessibility and in convenience to those who inhabit our commercial structures.

There are basic and fundamental reasons for the survival of downtown business areas, as they encompass the largest and finest retail centers, the centers of finance and headquarters for corporations, and afford the best of transportation through rail and improved highway traffic systems. It would then seem that, to assure future permanency of these downtown districts, it will be necessary to start the building up of marginal areas for residential needs, through the removal of restrictive measures now controlling financing of construction projects in these areas, and arousing the interest of private industry to improve these sections of our cities.

A re-appraisal of marginal areas for tax purposes will be a necessary prerequisite in conversion from terms of wishful commercial expansion on the part of owners to terms of realistic residential location establishment. The planning of safe streets through these residential areas for the diversion of through and heavy traffic to established traffic arteries must go forward for the protection of the residents. The establishment of parks and recreational spaces goes hand in hand with the complete re-zoning of marginal areas to give a permanency toward decent living.

The proposals for rehabilitation of marginal areas come not from the standpoint of humanitarian or Utopian concepts, which provide decent habitation at public expense for the underprivileged, but rather from the standpoint of a fair return on capital investment to private industry, which will furnish those dwellings that will be required because of another population shift, now imminent, from rural and suburban to urban areas.

Many basic factors point toward that coming trend of population shift. We learn from those who have made long study of people that within the last twenty years a very definite trend has developed.

In 1920 one-sixth of the population was over 50 years of age, while in 1940 one-fifth of that same population had passed the age of 50. This change is due to the efforts of medical science in checking infectious diseases and those constitutional ailments affecting heart and lungs. This means that a large percentage of our people have passed the age of reproduction and have entered the age of greater consumption and the period of diminishing return in amounts produced per capita.

As we find a rise in median age, we note that the number of children produced per family declines, and as the family size declines in proportion to a slightly increasing population, the number of family units increases, and the demand for dwelling units increases accordingly, although the requirement for dwelling space per family lessens.

As median age advances there is a definite social trend towards security, as there is a readiness for the acceptance of the doctrine of social security in peoples of advanced age brackets.

In support of this theory, we may quote from Howard Loeb in August, 1936, *Common Sense*, ". . . . America has been transformed from a society in which 75 percent of the population were free enterprisers into a social body in which 80 percent work for wages or salaries, in the pay, for most part, of corporations: 14 percent consist of farmers striving to recover cost of production, and some 6 percent only devote themselves to entrepreneurial activities."

In short, this means that populations are becoming more and more interested in security and are placing less and less future upon enterprise.

No matter how eloquently the politician may declare or what may be contained in wishful planks of party platforms, we are not returning to the good old days of yesteryear when private enterprise was the long-sought goal of the young man.

We have seen that world-wide tendency of populations to give up political and sometimes religious liberty, and even civil rights, to attain for themselves some measure of economic security through employment for wages or a salary.

Perhaps technological development and progress in big business within the last 20 years has hastened this process, for certainly that progress has lessened the chances for success of small enterprise.

The result, however, of this definite social trend has been to throw the burden of new capital required upon the State, which is manifested in rapidly growing public debt and the demand that a greater number of public services be supplied by the State. With rapidly increasing public debt, due to social demands upon the State, we find that the State, regardless of its benevolent and solicitous attitude, finds that its only source of money supply is that derived from taxation of one kind or another.

Statistics show that during the last ten years taxes have increased from 6 percent to 20 percent of the total cash income of our population, and, if the present trend continues, and recent developments in Washington would indicate that there is no immediate prospect for a cessation of spending, economists estimate that within the next ten years over half of our total cash income will be required for tax purposes.

What has all this rather profound thinking to do with our central business districts?

In my opinion, based upon a study of the many factors involved, it would seem that as taxes increase, along with increasing demand for public services, and, as the tendency increases toward a more definite social security, together with a rise in median age, smaller family size, and the accompanying demand for more units of habitation of more

compact and economical size, there will be a definite trend and ever-increasing shift of population back to urban areas, where economy of living, cheapness and efficiency of transportation, and proximity to employment are basic factors.

Thus we may expect to see the dismal marginal areas of downtown districts again become producers of financial return through rehabilitation in form and function, and become properly planned residential areas where gracious and genial living conditions will maintain.

Herein lies the challenge to planners, for it is only then that we may expect to see the permanency of downtown business areas become established and the process of decentralization halted.

Zoning: How far have we come? How far can we go?

HUGH R. POMEROY, Richmond, Va., Director, Virginia State Planning Board

WHEN we ask how far we have come in zoning, whom do we mean by "We"? The planners, as represented by what planners propose? The people, as represented by zoning ordinances in effect? Or the courts, as represented by decisions in zoning cases?

First of all, as between the planners and the people, there are so few planners and so many people. There are about 1,700 zoned cities in the United States and most of their zoning ordinances were prepared without the benefit of any high priest of planning (although it must be admitted that provisions from consultant-prepared zoning ordinances are frequently copied from ordinance to ordinance, until some regulation designed for a situation in New York City will finally show up in a zoning ordinance proposed for Farmville, with its population of 3,500). We must conclude that the distance we have come in zoning must be measured by the average front line of the zoning ordinances now in effect, and not by what the planning technicians may propose. So let us technicians consider ourselves to be a part of the people, at least for the purpose of this discussion: it may be good for us.

When we consider zoning as practiced in relation to the attitude of the courts, we must conclude that the courts, in general, are ahead of the people—ahead of this average front line of zoning about which we are talking. Even back in the "B. E." days of zoning (that is, "Before Euclid") a state supreme court, apparently tired of such weaseling arguments as that commercial uses could be kept out of residence districts because of the danger of the spread of disease by flies, declared that:[1]

[1]Miller v. Board of Public Works, 195 Cal. 492.

Justification for residential zoning may, in the last analysis, be rested upon the protection of the civic and social values of the American home. The establishment of such districts is for the general welfare because it tends to promote and perpetuate the American home. It is axiomatic that the welfare, and indeed the very existence of a Nation depends upon the character and the caliber of its citizenry. The character and quality of manhood and womanhood are in a large measure the result of home environment. The home and its intrinsic influences are the very foundation of good citizenship, and any factor contributing to the establishment of homes and the fostering of home life doubtless tends to the enhancement not only of community life but of the life of the Nation as a whole.

In less than ten years after the Euclid Village case another state supereme court was willing to uphold restrictive regulations applying to billboards, not on the ground that they might fall down and injure someone, but on the ground (among others) that they are an invasion of the highway travelers' right to be free from annoyance and that they impair the scenery, the protection of which is declared to be a public purpose.[1] More recently another court has upheld drastic regulations designed to protect scenery and has had the courage to say: "Perhaps a higher court will decide that I have attempted to force the hands of the clock forward too rapidly. If so, I am still confident that time will ultimately justify my judgment."[2]

The import of the decision first quoted is now found echoed in numerous zoning decisions; the others remain more or less isolated. Is this because the principle involved in one is sounder than that involved in the other? Not at all. The first decision was rendered fifteen years ago and during the ensuing time zoning in practice has been catching up with what the court then said. The other decisions referred to were rendered more recently, and zoning in practice is not anywhere near the limits to which the courts in these decisions have said it could go. The courts cannot lead the way in zoning; they can only feed on what is set before them. Progress is made only as zoning in practice moves ahead of what the courts have already sanctioned. The courts have been willing, as shown by their decisions in cases arising from pioneering efforts, to move forward much more rapidly than the people in general, as represented by the average front of zoning in practice, are willing to go.

This is not at all to say that everything which is new is thereby good; nor that the courts will approve every excursion from the sanctuary of established judicial opinion. There are limits beyond which the courts will not let zoning go; but it is important to realize that the limitations are not so much on advancing as on straying laterally. It therefore becomes necessary for zoning to develop a sense of direction along the axis of service to human welfare so that there will be a minimum of confusion as to which way lies forward and which would lead off the path into the bushes of whimsy.

[1]General Outdoor Advertising Co. v. Department of Public Works, 289 Mass. 149.

[2]Monterey County v. William Thomas Bassett, et al., Superior Court of Monterey County, Calif., No. 16969.

To illustrate, the courts are willing to uphold regulations which are designed to protect the character of residential neighborhoods, but very properly they will not permit this to be done by the unsound method of establishing valuation restrictions as a part of zoning, and will require that the regulations shall deal with the qualities of the thing being regulated in their relationship to the character of the neighborhood. The courts will not uphold some isolated regulation having an esthetic purpose nor one depending for its application on the taste of an administrative officer, but will uphold regulations heretofore regarded as being largely esthetic when these regulations are based on a comprehensive plan and especially when they interlock with other regulations which also have for their purpose the effectuation of the objectives of that plan.

The courts, although willing to sanction new types of regulations which are clearly designed to serve the public welfare and which are based on comprehensive planning, will not permit zoning to get too far ahead of the thinking of the people or too far beyond what the people in general will accept. This attitude is not with any conscious design of preserving what we vaguely call "democratic processes." Rather, it is simply the way in which democracy works. It has the very practical result of assuring that zoning, given proper administration, will work; since, if zoning is expressive of the general attitude of the people of the community, it will represent a way of doing things which the people have set for themselves.

How far we have come in zoning can be told in the story of the last twenty-five years, for zoning, as we accept the term today, is about that old. Its forerunners go back over two centuries before that. They began with regulations designed to exclude dangerous structures and noisome uses from congested areas, as illustrated by enactments in 1692 restricting slaughter houses to certain localities in Boston, Charlestown and Salem, and an enactment in 1706 requiring that a common powder house for Boston should be located outside the populous areas of the city. The advance made during the ensuing two centuries was no more than from these simple regulations to regulations designed to keep industrial uses out of residential areas, as exemplified by ordinances of the City of Los Angeles, adopted in 1909, which divided the city into industrial districts and a general residential district from which certain industrial uses were excluded.

These latter regulations logically grew into those in which there was a more detailed differentiation among classes of districts than simply, as in the Los Angeles regulations, between those in which industrial uses were permitted and those in which they were not; or, as in other early enactments, between residential and non-residential districts. Several important occurrences during the first quarter of the present century led to an almost explosive expansion of these rudimentary regulations into urban zoning as we know it today. These were:

1. Rapid increase in urban population. The rapidity of growth of cities tended toward heterogeneity of land use, both in previously developed areas and in widening areas of transition of use, and brought about the invasion of newer areas by haphazard development.

2. In larger cities, development of the skyscraper concurrently with the period of major urban growth. This was accompanied by land overcrowding, with resulting traffic congestion and inadequacy of light and air.

3. Rapid increase in the use of the automobile, resulting in:

(a) Greater mobility of population, tending to change established community patterns and thus to impair the stability of earlier land-use relationships.

(b) Extensive use of the automobile instead of means of mass transportation thus lessening the relative importance of local and interurban transit lines. This caused the abandonment of many transit lines and required changes in types of transit, with consequent alteration of community land use and population distribution patterns.

(c) Stagnation of property along traffic thoroughfares (apart from central business districts) by reason of impairment of its desirability for residential purposes as a result of heavy streams of traffic, automobile parking, and the tendency of commercial uses to scatter along such thoroughfares rather than to develop as business districts properly designed in relation to traffic and to surrounding neighborhoods.

(d) The need for provision of the specialized requirements of the automobile, such as servicing, repair, storage, and standing space. Garages and filling stations intruded into residential neighborhoods and retail shopping districts; automobile wrecking yards scattered themselves along traffic thoroughfares; and conflict arose between traffic movements and automobile parking.

All the results noted have strikingly interlocked with one another and have interacted on one another. As older neighborhoods have become less desirable, the urge has been to move "farther out," and the exodus to the suburbs has occurred in cities throughout the country. The larger cities have seen the development of satellite communities, these being not merely convenient neighborhood shopping centers, but replicas, on a smaller scale, of the downtown center itself. All these developments led one court, in deciding a zoning case, to comment on "the growing complexity of modern urban life."

These problems in community development have been intensified by land speculation and the tendency to treat land as an exploitable commodity and to regard land ownership as absolute, entailed with a minimum of social responsibility. Some of the effects of this have been population congestion, inadequate provision of essential community facilities, unsound land values, subdivision far in advance of or in excess of need, and instability of land utilization.

At the same time the increase of general education, a slowly rising level of culture and the increase of leisure time have led to a more critical examination of the social and economic adequacy of cities and their neighborhoods, and there is a growing demand for more satisfactory community patterns and for greater orderliness in community development. A growing social consciousness has led to a recognition that desirability of residential surroundings should not be dependent pri-

marily on the wealth of the inhabitants, but should be attained and maintained for all through measures of community planning and control.

But this growing social consciousness has not come alone from the stirring of men's souls. Of powerful effect has been the general detrimental result—and, even more so, the direct cost to property owners and to the community as a whole—of the misuse of land and of urban deterioration. Conflicting uses and haphazard development impair property values and destroy neighborhood character; they tend toward the stagnation of property which would otherwise be beneficially used in an orderly manner; they result ultimately in spreading areas of obsolescence, deterioration and decay, costly to maintain, economically unproductive, and socially detrimental. These results of earlier unplanned development are harassing cities the country over.

All these needs combined to present the insistent problem of correcting the results of haphazard urban development in the past and of obtaining orderliness in urban development in the future. It is this problem which called forth zoning as one measure of solution.

Urban zoning as now in general use provides for more or less complex regulations applying to the uses of land and buildings, the height and bulk of buildings, the open spaces about buildings, and the density of population. It has undergone three kinds of expansion in its brief quarter of a century of development. These have been successive in their origin, but each has continued, and all three are now in process.

The first expansion of zoning was from its early simple form, usually consisting simply of one class each of residential, commercial and industrial districts, to a more detailed differentiation among major classes of use. Thus, it is now customary for an urban zoning plan to include districts of the following classes: one-family residential, two-family residential, multiple residential (with further differentiation within these classes of residential districts on the basis of density of population), retail business, general commercial, general industrial and heavy industrial. Many zoning ordinances show further differentiation than this, setting up specialized types of retail business districts, or districts in which residential character is modified by low-density suburban conditions.

Along with the more detailed differentiation among major classes of use has come a broadening of the scope of zoning regulations themselves. This, in the main, is not found along the broad front of zoning, but in a few notable examples which point the way on. Thus, some zoning ordinances provide for regulation of the appearance of buildings along major traffic thoroughfares or in scenic areas, or control of the architecture of buildings adjacent to civic centers or in areas of historical significance. Area regulations have been supplemented by the requirement that space for automobile parking or storage space shall be provided in connection with multiple residential uses, and in some places in all

residential districts; and the requirement that loading and unloading space shall be provided for commercial and industrial uses.

The second expansion of zoning was an extension from its application within municipalities to its application to suburban areas under county jurisdiction. While this extension was primarily that of an urban type of regulation to suburban areas, it frequently found itself faced by problems which had not generally been found in municipal zoning. For example, a residential area gradually "feathering out" into the open country might find its residential characteristics in the outer areas modified by agricultural uses such as chicken raising, not occurring in the more compactly developed inner areas. Thus new types of district classifications would be required. County zoning has also had to deal with the problem of controlling the uses which develop along traffic thoroughfares as the result of the traffic, first in suburban areas, then in the open country, and has been developing new principles of regulation that are beyond the limits of urban zoning formulas. Regulation of the location of roadside business uses and the control of automobile wrecking yards and of billboards, both to prevent hazards to traffic and to protect the scenery are distinct contributions by county zoning.

The third expansion of zoning has been that of its application to non-urban land uses. This has grown out of broad studies of the most beneficial utilization of soil, forests and other natural resources. The districts established under this type of zoning deal primarily with agriculture, forestry and recreation. They may prevent settlement on land which cannot economically support agriculture or they may control agricultural practices which destroy the soil through erosion. This type of zoning operates in the field of land uses in the open country. We have seen that into the open country have also been extended types of regulation which are an expansion of urban zoning, such as the control of roadside uses and the protection of scenic areas. Thus, county zoning of an essentially urban character is meeting the non-urban type of county zoning and there must be developed a coördinated structure for the zoning plan which will comprehend both types.

Urban zoning has spread until over three-quarters of the urban population of the United States now lives in zoned municipalities. The 1,700 zoned municipalities are found in all States and range from New York City, with its population of over seven million, to towns of a few hundred inhabitants.[1] County zoning has proceeded more slowly than municipal zoning. County zoning regulations are in effect in suburban areas and in areas likely to be urbanized in only about thirty counties in ten States.[2] Non-urban zoning regulations, such as those controlling

[1]Municipal zoning enabling legislation is now in effect in all States, but in twelve of these it applies only to specified classes of municipalities or to specified municipalities.

[2]County zoning enabling legislation is in effect in sixteen States; in nine of these the statutes apply to all counties; in the others to specified counties.

agricultural uses, are in effect in only two States: Wisconsin, with about 35 counties having adopted such regulations, and Michigan, with two.[1]

While about 1,700 cities are zoned, there are over 16,000 municipalities in the United States, plus over 20,000 town and township governments in the 23 States in which these occur. The less than seventy counties in which either urban or nonurban zoning regulations have been adopted do not make a very impressive total against the more than three thousand counties in the United States.

In telling the story of how far we have come in zoning, it is necessary to take account of the shortcomings of much zoning as actually practiced. It is difficult to generalize in a field presenting such wide variations, but some broad observations can be made. Zoning officials are usually faced by some opposition in the formulation and adoption of a zoning plan in the first place, and by continuing efforts after adoption to break down its integrity by revisions in special cases. The initial opposition may result in a compromise plan; subsequent nibbling away both weakens the zoning structure and impairs the assurance of stability in land use which is an important benefit of zoning. Of the two, the latter is usually the more dangerous; a combination of the two may be disastrous. Many of the zoning ordinances adopted during the 1920's and still in effect reflect the optimistic belief of that period that cities would continue to grow and expand at rates then prevailing and almost without limit. In my own State an important city adopted a zoning ordinance in 1924. It then had a population of about 120,000. The ordinance, prepared by competent planning consultants, was submitted with a report which stated that the zoning plan was scaled for "large increase in population," being based on the needs of a population of 400,000. Now, sixteen years later, the population is less than 140,000. In my native city in California it was estimated some years ago that the maximum possible future population, about six times the population at the time of the study, could support about eight miles of business frontage. At that time there were on the market 29 miles of business frontage and it was estimated that when the subdividing of the land in the city had been completed and zoning had been applied according to the current optimistic pattern, there would be 56 miles of business frontage available. A small midwestern city, with a population of 27,000 in 1920 and of 40,000 in 1930, had enough commercial frontage under its zoning ordinance to take care of 537,000 people.

With rare exceptions, zoning regulations throughout the country are woefully inadequate in their area and density requirements. In order to secure adequate light, air, privacy, and safety from fire hazard, dwellings should be at least as far apart laterally as their height to the highest point of a flat roof or to the midpoint of a pitched roof. Yet many zoning

[1]Of the States which authorize county zoning, nine permit rural zoning; in six of these the statutes apply to all counties; in the others to specified counties.

ordinances permit side yards as narrow as three feet, resulting in dwellings as close together as the spread of a man's arms, with practically complete deprivation of direct sunlight in side windows, with serious impairment of family privacy and with accentuation of fire hazard. Under many zoning ordinances an apartment house may be allowed to cover almost the total area of its lot. Such an apartment house is not simply borrowing the light and air of its neighbors; it is confiscating their light and air, with no possibility of restoration. Population densities in multiple residential districts as high as 70 or even up to 100 or more families per acre are possible under many zoning ordinances, regardless of the fact that forty families per acre is the maximum which should be tolerated under any circumstances, even in the heaviest multiple districts in the largest cities (and with the highest land values), and that fewer than forty families per acre should be the limit in most of the multiple residential areas in most cities.

Thus far have we come and thus inadequate is much that we have done. Beyond these shortcomings most zoning ordinances fall short of their possibilities as instruments of positive direction of development. But in the recognition of this there is hope. It is a distinct advance that there is emerging throughout the country the realization that a zoning plan must do more than recognize the obvious and merely seek to prevent that which is clearly bad, and that it must be devised as a means toward the accomplishment of far-reaching objectives in community development. These objectives may not always be the end results of existing tendencies. It is likely that some of the existing tendencies are not sound and require redirection. The courts have long recognized the importance of the forward looking aspect of zoning. Fifteen years ago a state supreme court said:[1] "Zoning in its best sense looks not only backward to protect districts already established but forward to aid in the development of districts according to a comprehensive plan having as its basis the welfare of the city as a whole." In its forward looking aspect zoning should be the detailed expression of a broad land-use and population-density pattern according to which the community shall develop. Nor is this function confined to new communities. Neither cities nor rural areas are static, but are always undergoing gradual change. Zoning must provide a guide for the change; and a pattern of development, or of redevelopment, is required for the established community even though this pattern must take more of its form from existing conditions than in a community which can be guided from the ground up. Obviously the basic land-use pattern, while fundamental, cannot stand alone, but must be an integrated part of a complete physical pattern, covering the physical structure of the community, its physical facilities, the nature and extent of its land uses and the distribution and density of its population. Unless zoning is based on this broad foundation, it can do little

[1]Zahn v. Board of Public Works, 195 Cal. 513.

more than deal with the obvious and must face the future of the community blindly.

Zoning cannot be regarded as a master plan, nor as a part of the master plan. The master plan is a basic physical pattern. It is expressed in broad and general terms. In zoning enabling acts the term "general location, character and extent" is frequently used to describe the form of the master plan. The very nature of zoning is incongruous with this "general character" of the master plan. Zoning is precise and exact. Much confusion in thinking and practice can be avoided if zoning is correctly regarded as a measure of control which is invoked as one of the means used to make the master plan effective, to translate the master plan from a pattern and standards into reality. This conception of zoning will also lift zoning from merely a means of preventing obvious abuses to its greater usefulness as an instrument of direction.

In the realization of this we begin to find the answer as to how far we can go in zoning. It must first of all be recognized that we can go little further than we have thus far come unless zoning is applied as part of a comprehensive planning process, based on a comprehensive master plan.

It would be fatuous to attempt to indicate specifications as to how far we can go in zoning. However, it is possible to point out a number of specific types of regulation in which considerable advance is possible and may be expected.

Much more can undoubtedly be done than at present with regulations which are largely esthetic in purpose. Examples of this are control of the appearance of buildings along main traffic thoroughfares, in scenic areas and in the environs of public buildings and parks; control of the style of architecture of buildings adjacent to civic centers and in areas of historical significance; control of the design of buildings and of their their display of signs in business districts, especially in neighborhood shopping centers; requirement of extensive set-backs, say two or three hundred feet, for large industrial uses in open areas, with possibly the requirement that existing natural cover in the space thus left shall be substantially maintained.

A few examples, found principally in California counties, on Long Island and in Arlington County, Virginia, indicate that the curse of billboards along the open roadsides and of sign infestations on business establishments along the roadsides and in neighborhood business districts can be eliminated. Billboards can be prohibited along the open roadsides, even in districts in which limited business uses for the service of the passing traffic are permitted, and these uses themselves can be strictly limited in their display of signs. The examples of regulations accomplishing these purposes illustrate how far we have come in a few places and indicate an advance which should be made on the broad front of zoning.

It is not likely that regulation of the appearance of buildings can or

should be extended generally to dwellings in residential areas. But where a dwelling would be markedly incongruous with the character of the neighborhood, it may be possible to prevent its establishment there. Most zoning enabling acts provide that zoning regulations shall be made "with reasonable consideration, among other things, of the character of the district and with a view to conserving the value of buildings." A dwelling which is greatly different in size or appearance from dwellings prevailing in the neighborhood might conceivably be as detrimental to the neighborhood as would some retail business use. Whether definite standards for determining or measuring "incongruity" can be devised, or whether the issuance of a building permit for an obviously incongruous dwelling should be left to the discretion of the board of appeals upon reference by the administrative officer, can be determined only after considerable experimenting. In this principle, however applied, may lie part of the answer as to what to do with shacks which seek to intrude into good residential neighborhoods. But there are two sides to the problem. Housing for low-income families must be provided for somewhere: It should be adequate housing, provided in accordance with a housing plan, as a part of the master plan. The detriment occurring to a good residential neighborhood by reason of the intrusion of shacks is outweighed by the social detriment of forcing the families housed in the shacks to find their housing in slum areas. Thus, protection of the "better" neighborhoods must be balanced by the assurance of adequate housing for all families.

Non-conforming uses can be eliminated. A non-conforming use has not established a vested right by which it must be permitted to remain forever in its location unless it burns down or is abandoned. The only right which a non-conforming use has is the right to the reasonable enjoyment of the investment which it represents. (This is assuming that the use is not a nuisance per se, subject to abatement as such.) This right is protected if the non-conforming use is allowed to continue during a reasonable time in which the investment will be amortized. Rules should be devised for determining what this period of time is for various types of structures. Possibly the board of appeals should participate in administering the regulations. The problem is much simpler with non-conforming uses of land, not involving permanent buildings, and with such uses as billboards and automobile wrecking yards, which do not represent substantial investments or which can readily be moved. Any of these latter non-conforming uses can be eliminated by allowing them a reasonable time, say from six months to a year or so, depending on the nature of the use, in which to find other locations, if possible, and to move to them.

The way has already been well pointed to the requirement of off-street automobile parking space. There is no doubt that this can be required for all new residential uses, multiple or otherwise. Within

limitations imposed by existing patterns of business and industrial districts, it can also be required for new uses in these districts. Business and industrial uses on parcels of any considerable size can be required to provide loading and unloading space off the street.

There is need for a type of retail business district classification under which the business districts will be carefully designed, including not only traffic access, space for automobile standing, loading and unloading space, and control of the display of signs, but also the architecture of the buildings, with the provision that business uses shall be permitted only in complete conformity with the design.

There has been considerable discussion of flood plain zoning and it can be expected that progress will be made in regulations of this type, under which areas, which are subject to periodic or frequent overflow, will be closed to uses which would be damaged by such overflow and which would impose on the community as a whole burdens for rescue, relief and rehabilitation. The permitted uses in flood plain areas may range from purely open land uses, such as crop agriculture, to some types of heavy industrial uses, such as storage yards which can readily be vacated if necessary.

Zoning can probably be used to protect watersheds, not only to prevent the contamination of domestic water supplies, but to prevent excessive runoff and consequent flood damage. Likewise, zoning can be used to prevent methods of soil cultivation which result in erosion.

The validity of advances in the foregoing types of regulation depends on the comprehensiveness of the regulations themselves and of the zoning plan of which they are a part. But more than this, the extent to which they can go, and to a considerable degree their validity, depend on the comprehensiveness and the soundness of the underlying master plan on which the zoning plan is based. And in considering zoning as an instrument of planning, we can go beyond a listing of specific items of regulation in which advances can be made, and can give attention to the accomplishment of the broad objectives of the master plan.

One of the most important advances which should be made in zoning is to achieve a more certain and more comprehensive control of density of population and intensity of land use. The density standards of most existing zoning ordinances are those of expediency or those which simply try to prevent anything worse than that which has already happened. What is required is a comprehensive land-use and population-density pattern, in which the structure of the entire community will be set forth in proper balance, with zoning serving as a detailed specification and application of this underlying pattern. If this calls for reducing a permitted population density in a multiple residential area from eighty families per acre to forty, or twenty, or less than this, let it be done. If it calls for a density of one family per five acres, let this also be done. Neither regulation might be able to stand if compartmentalized by

itself, but they, and all between them, can stand as together constituting an instrument for the accomplishment of the objectives of the underlying plan. Under housing regulations which prevent overcrowding, and within specified ranges of levels of family income, it may be possible to express density requirements in zoning in terms of the sizes of the dwelling units, thus achieving some control of the density in terms of numbers of persons rather than of numbers of families.[1]

The underlying land-use and population-density pattern must be more than a fabricated design which merely takes account of topography, past development, means of transportation and apparent trends in land use. It must be designed to serve the needs and habits of the people of the community. It must take account of the economic base of the community, of the reflection of that economic base in the economic character of the community as represented in levels of family income and in the structure of property values, and it must take account of the social and cultural characteristics of the community. It must consider space standards not only in terms of light and air, but also in terms of the effects of urban claustration on fertility rates and on the biological sufficiency of urban populations.

There is also need for the development of sound principles for controlling the intensity of the use of the land in business districts. Such control is now accomplished to some extent by means of height and bulk regulations: it is obvious that there is a lower intensity of use if the height limit is three stories than if the floor area of the building can equal fifty times the lot area. The purpose of height and bulk regulations in business districts should be not only the preservation of light and air but the providing of a proper distribution of uses in relation to the design of the business district, both as to its use and as to its physical structure. Thus far, consideration of the proper distribution of business district uses has related principally to the traffic capacities of streets. There is a broad field of functional design of business districts yet to be explored. When it comes to equalizing the "development load" on the land in relation to business district design, the best that has been done thus far in zoning has been to establish height and bulk limits which may be less than the heights and bulks which would have occurred in the absence of regulation, but which, except in rare instances, do little more than just that. There is a lack of adequate scientific information as to the factors entering into the aggregate results of the use-density of the business district on traffic capacities within the district, and as to desirable functional and use-density patterns. Daytime "population" per use varies widely among various uses, and the population turnover per use varies still more. Until exhaustive research, far more extensive than anything thus far undertaken, has unraveled some of the complexities of the problem, and until a coördinated method of control has been

[1]Arlington County, Virginia, is now experimenting with such regulations.

worked out (involving tax policy as well as zoning regulations) height and bulk limitations beyond those necessary to assure adequate light and air are largely arbitrary. Meantime, zoning in practice can do little more than prescribe apparently reasonable "envelopes of open space" for buildings in the districts of most intensive use. But at the same time means should be sought for extensive research looking toward the establishment of sound principles for the control of use-density. These principles, and the general patterns resulting from them, should be embodied in the master plan and zoning regulations should be devised to accomplish their purposes.

A second important use of zoning as an instrument of planning is in the rehabilitation of deteriorating and blighted areas. Much of the zoning in practice has tended to accelerate blight. It has set high density standards allowing further overcrowding in areas already deteriorated because of overcrowding. It has multiplied the detriment of the undesirable situation of residential property adjacent to major traffic thoroughfares by excessive zoning for business purposes. It has zoned deteriorated residential neighborhoods for industrial uses, simply because they were deteriorated and without regard to the possibility of general industrialization, and has thus destroyed what residential values remained. In deteriorating neighborhoods zoning may not only accomplish a valuable protective function by delaying the forces of decay and preserving existing use values for a much longer period than would otherwise be possible, but can look ahead to the future use of the neighborhood in the general structure of the community and can apply regulations which will best guide a changing use pattern. Regulations which could not stand by themselves take on an importance by which they are justified, if they are designed to accomplish the purposes of an underlying master plan. There would seem to be no reason why regulations, skilfully designed and operating gradually, could not be used to effect a complete change of use, such as from industrial to residential. The service of the public welfare as represented by a comprehensive master plan is of powerful effect in lending validity to regulations which, if isolated, would be arbitrary, capricious and ineffective.

A third advance which can be made in employing zoning as an instrument of planning is to use it as an implement for the protection of planned rights-of-way (either new rights-of-way or the widening of existing rights-of-way) and of land recommended for public use, according to the underlying master plan. In some States planned rights-of-way may be protected by the adoption of an official map; in others by the adoption of "precise plans" based on the master plan. In other States there is no separate statutory procedure for the protection of planned rights-of-way, and there should be no good reason in these States for not establishing these future right-of-way lines as a

part of zoning. They thus become simply an additional regulation of the location of buildings (in addition to the regulation of their location under yard and area requirements) for the purpose of effectuating a part of the master plan. Regulation of the locations of buildings through yard and area requirements is for the purpose of assisting in the effectuation of the land-use and population-density pattern and the community design standards of the master plan. The adoption of the lines of future rights-of-way is for the purpose of assisting in effectuating the street and highway part of the master plan, and in some respects there is distinct advantage in including them in the zoning plan, for thereby yard requirements can more readily be adjusted to them. In the legal effect of the establishment of the lines of future rights-of-way, zoning should operate in the same way as the adoption of an official map or of the precise lines of future rights-of-way under special statutory procedure: No buildings or other permanent improvements should be permitted within such lines, with, however, the customary procedure for the granting of variances in cases of practical difficulty or unnecessary hardship.

Generally, no such clear-cut results can be obtained in dealing with land areas required for other types of public use, such as for park and other recreation purposes, public building sites and other uses requiring substantial parcels of land. Protection of planned rights-of-way may require little more than a building setback; protection of sizable areas required for public use, if complete, would usually operate to prevent a reasonable use of the land. However, it may be possible to accomplish a partial limitation of use pending public acquisition of the land. The limitation might be either of the nature of use or of the intensity of use, or both.

The extent to which this could be done would probably depend largely on the general intensity of use in the area of which the land in question is a part. In an agricultural area it would doubtless be possible to prevent any building construction on lands along water courses recommended by the master plan for future park or parkway use. In an area of intensive urban development the limitation could not be so great. If the land in question were situated within a commercial or industrial area, it would not be possible, for instance, to require that it should be used only for residential purposes. However, the use might be limited to predominantly open-land commercial and industrial uses (again, with adjustment possible in cases of unnecessary hardship). The choice is simpler if the general area of which the land is a part is as yet undeveloped, with the decision to be made as to the degree of intensity of use to be permitted under the zoning ordinance. There the underlying master plan, if it is comprehensive and competent, may possess a power sufficient to dictate that the land in question should be zoned for a low intensity type of use, even though the trends of develop-

ment indicate that the general area of which the land is a part may be subject to future development of a greater intensity.

Another example of regulations designed to protect a part of the master plan is the establishment of height limits applying to buildings adjacent to airports. Such height limitations, standing by themselves, might be of doubtful validity, but if the location of the airport under consideration is in accord with a master plan, it takes on a significance which justifies regulations designed for the protection of the airport. Such height limits should properly be included in the zoning plan, since there is no reason for imposing two sets of regulations applying to the heights of buildings and other structures, one the district regulations of the zoning plan and the other special height limits around airports. The height limits otherwise in effect in the districts surrounding the airport under consideration should be modified by the height limitations which are required for the safe use of the airport.

A fourth advance in the use of zoning as an instrument of planning is in the application of use and density control to prevent scattered urban expansion and premature urban development. The land-use and population-density pattern of the master plan, if it is to be competent, cannot be confined to the political boundaries of municipalities. If the municipality is a part of a metropolitan area, the plan must extend to the entire metropolitan area. If it stands more or less alone, the plan must extend at least to the area which is rather closely related to the municipality economically and socially. The land-use and population-density plan will not indicate a static pattern, but should indicate, in an area which is subject to population increase or in which the economic base is changing, areas which are subject to immediate urban development and those which are ultimately subject to such development, in so far as this can be determined. It is recognized that these are relative terms, but they can be somewhat defined in relation to the curve of probable population change or to the change in community pattern which is likely to result from a change in the economic base of the community. The underlying land-use plan will thus indicate areas which are subject to expanding urban development within a reasonable period of time, based on the rate of population change, the nature of economic change, and the estimated rate of utilization of land for various types of major land use. Scattered urban expansion beyond such areas, frequently as a result of land speculation, unbalances a normal and orderly extension of utility and other services and results either in excessive cost per unit for such services or inadequate provision of them. Such scattered uses also tend to disrupt the land valuation stuctures of the areas in which the intrusions occur.

A major method of dealing with the problem of scattered urban expansion is the adequate control of subdivisions, covering not only the design of the subdivision and the requirement that the subdivider shall

provide street improvements and utility services, but the requirement that he shall prove that there is an actual public necessity for the subdivided property. Zoning can supplement this method of control and it can also deal with scattered urban expansion which occurs apart from subdividing.

One method is to prescribe a large minimum area for building sites in a wide belt around the community, thus preventing development on a small-lot basis. If the underlying land-use plan is valid, and if its objectives are clearly and honestly stated, there is no reason why the building site area and occupancy standards should not be such, for instance, as will permit only an agricultural use. The use regulations of the zoning ordinance should prescribe either a one-family residential use or a combined one-family residential and agricultural use. Such regulations should be cross-tied with the subdivision control regulations, so that the minimum lot area prescribed in the zoning ordinance shall also be the minimum lot area to which land can be subdivided. As normal and orderly urban expansion takes place within the area available for it, the open belt can be progressively moved farther out to permit the urban development of new areas. This procedure will not limit the territorial expansion of cities, but will at least assure that such expansion as does occur shall take place in an orderly manner, and will lessen the conflicts among uses which arise in extensive and shifting areas of transition from open land uses to urban uses.

Ingenuity, shading into fantasy, could doubtless suggest other advanced applications of zoning. An outside-the-world view of the inadequacies of most of our urban patterns might lead, if not to an attitude of futility, at least to a wish that zoning could be used to assist in erasing these patterns and starting over again. But urban change is rarely cataclysmic, and then usually only as the result of disaster. We must work with the community forms which we have, seeking gradually to mould them into designs better calculated to serve human welfare. Zoning is a directive force in this process and the advances in planning suggested above are limited to the possibilities of practical accomplishment, without wandering off into speculation as to what further it might be possible to do.

Thus far have we come in zoning: at least to the point where we begin to realize that zoning must be an instrument of planning if it is to justify itself as more than an expedient measure. Thus far can we go in zoning: as far as zoning will reasonably serve the purposes of the underlying master plan upon which it is based. Thus far have we come: to where we find that we hold in our hands an instrument of greater power and with a sharper cutting edge than we had realized. Thus far can we go: as far as we are able skilfully to use this instrument for the service of human welfare as represented in the broad purposes of the master plan.

San Francisco as Seen from New York

REXFORD G. TUGWELL, New York City, Chairman, New York City Planning Commission

THIS is a rather difficult situation for me. I was asked to talk rather simply before the Down Town Association about the experience of the city by which I am employed, and I find in the audience not only the Governor of the State, but all three members of the National Resources Planning Board, not to mention many distinguished planners in other fields. That leaves me at a loss to know exactly to whom I should talk. I am going to assume, however, that the members of the National Resources Planning Board and the Governor have to take the consequences, and that the merchants and I are going to consider something which is not at all noble, is a little dry and dusty, but nevertheless, to the merchants and to myself, a matter of considerable importance. So I hope I may be forgiven if I don't seem to amuse those of you who are neither interested in city planning nor particularly, perhaps, in these days, in the city itself. I can understand very well why you might not be, with all that is going on in the world.

The city, important as it is in our daily lives, is something which we usually take for granted. It is not an exciting thing often, except when a reform movement is on. At other times we are apt to assume that it will more or less manage itself. All the experience I have had in government, not only in city government but in others, has led me to believe that it is a fiction that there can be a government of laws and not of men, and, so far as planning is concerned, I am thoroughly convinced that planning is an activity which cannot be set up and left to itself; it is fallacious to assume that if there is planning in a city it doesn't matter what kind of administrators there are. A government is only as good as the people who are running the government. That is true not only of Federal and state government, but of city government.

Let me say at the outset that I have not come to San Francisco to tell you anything about San Francisco itself, nor about what your possibilities are. I have come merely to tell you something about the experiences we have had in New York in doing somewhat the same things that I judge you may be thinking of doing. Certainly there are a great many similarities: we are both great seaport towns, great centers of commerce; we both have regional rather than strictly municipal problems; we both have been planned badly in the past; we both have decaying centers and growing peripheries; we both are centers of management of large enterprises, financial, educational and cultural, and in the long run those, rather than, shall we say, industry and manufacturing as such are perhaps our greatest reason for being.

We have all these things in common, and so what we have been doing and thinking in New York may not be so irrelevant as it might at first

seem. Of course, the problems in New York are on a larger scale. New York has for some three-quarters of a century at least, if not longer, been a great center of world trade; civilization has until now been concentrated on the Atlantic's shores and New York was one of the centers of that culture and trade. I do not know whether it will continue to be.

I do not know whether the present movement toward autarchy, self-contained nationalism, or perhaps even self-contained hemispheres, may make of New York a city of the periphery of a continent (as the Planning Commission has said in a formal report) rather than at a center of world culture, but I think it may be possible. San Francisco has been at one of the centers of Pacific culture. It may also be true that San Francisco will find itself on the periphery of a continent rather than at the center of a culture. I think no one can say as to that. So far as we both are concerned, what we can do is to develop what we surely have got—that is, large management, finance, education, all that kind of thing; we shall do well to do the best we can with these.

About six or seven years ago New York had one of its recurrent reform movements and one of the particular incidents which was most spectacular in this reform movement was the choosing of a reformer to head the city government, Mayor Fiorello H. La Guardia. When he came into office, he, along with other people in the city, like Mr. Frederic Delano, who sits on my right here, began to appreciate that something must be done other than merely to think about reform. It would be possible, they felt, to make a distinct advance by rewriting the charter of the city, and so they undertook that. After considerable expert work, after long hearings, and after a great many draftings and compromises, the city put into effect, two years ago last January 1, its new basic law. My particular interest is that this charter included, not for the first time in New York but for the first time realistically, an agency for planning in the city.

There was nothing particularly novel about setting up a planning agency. A great many cities have them. I think, however, that there is something novel about the way it was done in New York. You know that planners, city planners, have certain instruments which they have been using for a great many years. Among them is one called a master plan—an idea of the future of the city, an idealization, if you like, of what the city may become. The master plan is not merely something which can be put on a map; nor is it something which can be put in files; it exists at least partly in the minds of people who love their city and who have worked for it; it is an idea of what that city's possibilities are for the future. But more practically this master plan is of use as a bench mark, a criterion, by which current projects—that is, things which are from day to day proposed and which may actually be undertaken—can be measured. The master plan sees to it, if it is a good one, that everything is fitted together and given its place; that there are, for instance, not

too many schools provided but just enough; that there are adequate sewers, but that the sewer department is checked in an attempt to overbuild; that there is a water supply which looks forward to supplying any possible manufacturing development there may be, as well as all the family uses there may be, but not twice that amount, and so on. The master plan is, in other words, an adequately scaled visualization of what the city might be in the future.

There was nothing new about this when New York's charter was being prepared. Books had been written about master plans. So the charter makers were not doing anything new when they adopted this idea and put it in the custody of a commission—a planning commission. There was nothing new about their determination that any new project from one of the borough presidents, from the park department, or from the education department, for instance, should be referred to the planning commission who would have made a master plan and would then be able to compare the two, informing the board of estimate whether or not the project should be gone forward with at the particular moment. It was when they got to this point that the charter makers evidently begin to think: "Well, there is more to this master plan than simply laying things out on a map and scaling them so that they fit together. There is something else here." And they cast about for what it was; and arrived at the conclusion that what they were feeling for was not only spatial relationships but also time relationships.

The charter makers had seen that it was important to say not only whether a new school, a new opera house, or a new health center fitted into the master plan but whether it was the opportune thing to do at the particular time. And at that point, again, they arrived at another conclusion, which was that it might be just as well, if they were thinking about time and the relation of things to each other, to think about whether it was possible to do it at all—financially, I mean. The result of all this cogitation was that they put another well-known instrument into the hands of the planning commission. This is called, in our charter, a capital budget. It might have been called an improvement budget or any one of a number of other technical names which accountants use; but what the term meant was that it was the duty of the planning commission not only to make a master plan, but also a capital budget and program which looked forward over a number of years, and put things not only in physical relation but also in time relation with each other. For instance, there should be a school at the corner of certain streets in accordance with the master plan, but it should be built in the year 1944 or 1946, not only because by that time the child population would have grown to the point where a school would be needed, but also because the city would have arrived at a point where the school could be paid for.

There are great difficulties in creating both a master plan and a capital budget which will occur to you at once. There are a great many

uncertainties which not even the wisest planning commission, or even anyone else, can eliminate. No one could have foreseen, in 1925, that New York City would be able to finance many millions of dollars worth of public improvements (more than was expected) because about half of them would be paid for by the Federal government, thus advancing the capital program about twice as fast as could otherwise have been done. And nobody would have been wise enough to have said that because of depression or war there might be a drop in real estate values which would so cut tax income that it would be difficult to go on with a program once laid out. These are things which in the kind of world we live in we cannot always foresee. That does not excuse us from doing the best we can. And it does not detract from the essential value of budgeting: A gain of 25 percent in certainty is of advantage even if it cannot be said to be perfection.

In the master plan, in New York, we lay out what is an ideal visualization of the city; and in the capital budget we lay out what looks at that time like a fiscal program which can be met. Now, it may be that it cannot be met; but every year it is revised for six years in advance, not only for the current year coming, but for six years in advance. In a changeable and unstable world our budget comes, I think, as close as we are able at present to achieving stability.

There are other instruments, not so essential perhaps as those I have named, which planners customarily use, but still important. There is, for instance, one which is older than either of these as a formal planning instrument. It is usually called zoning; what it means is that somebody in authority in the city lays out regions within which certain kinds of developments will and will not be permitted, and sets certain standards for them. There have been in the past many arguments advanced for zoning—among them that it tends to stabilize neighborhoods, that it enables people to look forward to establishing themselves, either in a business or a home, in a neighborhood which will remain for some time to come the same as it was when it was chosen. There is also the fiscal argument that zoning levels out realty values; and, from the city's point of view, that it tends to maintain taxable income. There is, of course, the argument against zoning, that those people who administer it in many cities are the ones who are able to benefit themselves, rather than the city at large. That, of course, is very easy to do. If those people who have realty interest are allowed to manage the zoning of the city they can create for themselves great advantages. This reenforces what I have said about the need for decency in government. Because zoning can be and is abused, it does not follow that it is never good. When the charter in New York was being written, zoning was an old device there—in fact, New York had the first real comprehensive zoning ordinance in the United States. But the city was by that time suffering from having been first in the field. There were other ordinances which were more

modern and more comprehensive. However, such as it was, the people who wrote the charter put zoning, along with the master plan and capital budget, into the hands of the planning commission.

One other instrument, too, they gave the commission—the custody of the city map. That is a highly technical affair and doesn't sound very important at first, but when it is considered that anybody who wants to do almost anything in a city of a comprehensive sort has to come to the city authorities to get some kind of change in the map, then it will be realized that the agency which has custody of it is in a very good position to bargain with the person who wants a favor. If a developer, for instance, wants to move a sewer, if he wants a new street, or if he wants to eliminate an old one, or if he wants to do any one of a dozen things which developers do want, whether it is for an industry or for a housing development, he has to come for map changes to the body which has within its possession this visualization of the future which I call the master plan, and within its control the capital budget. The Commission then is in a position to bring to bear its determination of what ought to be done in the particular district which it is proposed to develop. This control is a powerful weapon.

The only novelty about what was done in New York was in putting all these instruments together and working out for the first time the actual physical possibilities of the city in terms of a financial program. Anyone who knows contemporary city government will recognize this as of the greatest significance, for practically all cities in the United States have reached the limit of their power to make expenditures for new improvements. It is almost impossible to go any farther in most cities, and, certainly, that is true in New York. In New York we have got in the future to use the greatest economy, the greatest foresight, in order to give people the facilities which more and more they are demanding of the city. People are no longer satisfied with dirty streets, with an impure water supply, with health centers which are inadequate, with schools which don't educate. City government in the United States may be on the verge of a renaissance in all these matters, and I think that an adequate and competent planning body, given the powers that were given to the planning body in New York, can be of the greatest assistance, especially in setting up proper relations and in working out a financial program. I don't think it can be a substitute for any other part of government. I am sure it can't. For instance I know it couldn't have been done in New York without Mayor La Guardia's support. But given such support it is worth much more than it costs any city.

When I spoke of the common characteristics of our two cities, I mentioned one factor which I went over rather quickly. That is, that our two cities are decaying at the center and growing at the peripheries; but I want to tell you, as I don't need to tell anybody who knows city planning in a technical way, that that is true of practically every city in the

United States. What the remedy for it is I don't know—or, rather, I know that it must be very drastic. For a group of downtown merchants, I can assure you, it is a matter of life or death, just as it is for the central merchants in New York City who have just come to realize that fact in the past year or two.

The problem really arises because of a change which none of us can do anything about. Our cities have, to put it bluntly, almost stopped growing. Census figures show very clearly that in most of the cities of the United States at least the central portions of the city have altogether stopped growing. What growth there is, is confined to the peripheral area, that is the suburbs, most of which are outside the city limits. This fact would not be important if population were growing as fast as it did in the decades from 1900 to 1920, but that is no longer so. What happens now if a family moves from the center of the city to one of the suburbs is that there is a family gone without replacement; there is a vacant piece of land, which is by that much reduced in value, and that means almost completely. This is responsible not only for the fiscal condition of our cities to a great extent, but also for their appearance. They are shoddy, rotten, and run down, and this is true not only of New York, but of almost all cities in the country. It is argued by eminent authorities that this process must go on; that the only way to rebuild the centers of our cities is to ruin all the people who own land in the center of the cities, to carry on this process until they give it up almost voluntarily. Of course it is true that this is exactly what is happening. Perhaps that is what we want to happen; but I think we ought to know what we're doing.

It may be that real estate speculators on the outskirts of the cities ought to be allowed to ruin all the landlords and all the real estate speculators in the center of the cities. I don't know. But that is not a planned way to approach the situation, and, from the point of view of a city official, I can assure you that it ruins the city while it ruins the landlords. When a family moves out from New York to the suburbs the family is not there any longer to be taxed and the merchants from whom that family used to buy are no longer there to be taxed. They are buying somewhere else. There must be a better way to do it. We have thought of a number of ways in New York, though none of them has yet come to fruition.

We may as well be frank: Our cities are ugly and inhospitable. They are growing more so. Believe me, when people move away they don't take it lightly. People don't move out from New York City to Westchester County, nor, I assume from the center of San Francisco, we'll say, to Palo Alto, simply for the sake of moving. Mothers move because they can have a place for their children to play, because the schools out there are newer; because there is no adequate zoning within the city which would control the kinds of abuses which families will not live along side

of. These things have got to be corrected if we are to keep our cities solvent, and keep them functioning as decent places in which to live and work.

Perhaps I have borne down on this particular problem a little hard, and yet I have come to feel, as I have studied my own city, that it is almost the first problem we must learn to solve in New York—how to assemble and rehabilitate properties within the center of the city; how, if you like, to create suburbs within the city instead of outside, because there is not going to be in the future a growth of population which will be sufficient to populate the suburbs and the centers of the cities too. In the future either we are going to have to bring the population back from the suburbs or we are going to have to allow the city itself to be ruined.

I said when I began that these problems, in the kind of world we read about in the papers every day, must seem to all of us to be, however important individually, somewhat trivial, and yet, I believe, it is in this kind of thing that our democracies, to give them a name which I think they don't altogether deserve, are most faulty. We have not learned any better way to improve our cities than to let one set of business men ruin another set. I am sure that there is a better way to do it. An adequate planning body, firmly set in the city's government, can contribute a great deal toward the solution.

Zoning and the People in King County, Washington

JOSHUA H. VOGEL, Seattle, Wash., Planning Engineer, King County Planning Commission

THE folks living in the area around the City of Seattle several years ago made their own study of zoning and even wrote a set of zoning regulations. They presented these regulations to the County Planning Commission asking that these protections be given to them and to their properties.

When one committee came to the office of the Commission and asked that they have zoning applied to their district, they were asked about the use of their land and why they wanted zoning. They answered that they were in the chicken business, were raising rabbits, some had large kennels, others had a few pigs, and some were raising goats. They explained that once they had lived in an area north of the city with vacant areas around them. These vacant areas later had been subdivided and the residents in the new homes had complained about their kennels and hogs. That district had become too crowded for them so they had moved to the south of the city where they could have more room. Although they were in the small animal business, nevertheless, they loved their homes

—and land and did not want to be crowded out again nor did they want slaughter houses or industrial plants coming into their district.

In order to have information as to what "we-the people" desired for their land, we suggested that all the community and improvement clubs and other organizations have their own planning committees. We furnished them with maps of their district. There are several hundred of these clubs in King County, which practically cover the whole county. These local planning committees use the maps to mark down their desired land use, roads, and other improvements.

King County Planning Commission has been in existence for 13 years. It has had a legal status since 1935, when it was formed according to the State Enabling Act. From 1935 to 1937 the Commission was very busy trying to obtain and prepare the basic information, mapping land use, populations, location of the flood plains, the publicly owned lands, the highway system, etc. It has been difficult to keep ahead of the demands of the people for detailed zoning maps. We asked for help of committees from the real estate board, engineers and others. We have been able to prolong this study by the local participants until we could prepare our comprehensive maps, township by township.

"How far have we come?" We have come far enough over a period of 17 years to have much experience with Seattle's zoning ordinance. We have come far enough to assemble comparative statistics and have had a number of court decisions. We know the errors of the original assumptions as to the quantity of land required for various uses. We have learned the limitations and shortcomings of our zoning regulations. We have developed better methods of planning as a basis for zoning regulations and have aided control of land use by platting and subdivision regulations. These platting and subdivision regulations were the result of the work of interested committees, real estate board, and engineers.

The mistakes made by the City of Seattle have thrust the people out into the county for better living conditions. In the county most areas are living under regulations which give a population density of 4 people to the acre.

Our land-use survey in Seattle shows 50.5 persons per acre in the used family dwelling district. One-quarter of the residences in Seattle are in areas zoned for retail business. There are more acres for residences than for business in the zoned business districts. There is five times as much single family dwelling acreage as multiple family acreage in second-residence districts. There is more than one-half as much residential as commercial use in the commercial zones. There is more than one-third as much residential use as manufacturing in the manufacturing zone. The apartment house districts were built up to 141.0 persons per acre. Although Seattle has still one-half of its area vacant, the areas that are used are overcrowded. The people out in the county do not want

such conditions. The greatest density allowed under county zoning regulations is 18 people per acre in the residential districts. This is generally less than that because of the platting regulations. In the multiple family residential districts the density might go as high as 40 persons per acre. This is still too high. The people have been living in the county at peace and are determined to keep the county a fit place to live.

We have profited by the help given us by the agricultural departments of the county, state, and Federal government. We have received assistance from the standards set up and followed by the Federal Housing Administration and by the Loan and Mortgage Associations.

We have received the assistance of many other organizations. We have had the help of the local farmer study groups who have given us their maps and advice on sub-marginal lands. These farmer-prepared maps together with our detailed soil survey maps give us complete agricultural soil information. "We—the people" have a program as to the use of our tax acquired lands. We have planned preliminary locations of our scenic drives and have built several hundred miles of these drives and by zoning we are attempting to protect roadside development.

Zoning is a process of introduction of facts and evidence, then education, which is followed by adoption of maps, area by area. Zoning in some cases has been an arrestive process giving us time to prepare plans and to arrange for finances for construction of improvements.

We have come far enough to know that zoning is successful in our small towns, even including lands in these small towns which are zoned for agricultural use. We know that zoning has not been entirely successful in the large cities, largely because neighborhood areas and local planning committees did not help make the plans which resulted in zoning maps and regulations.

We have zoned areas in the county for metropolitan use and also have zoned districts as agricultural, recreational, forestry, and watershed.

We now have a problem of determining a system for licenses or fees, to help pay for and to assist in the enforcement of zoning regulations. How legally to enforce non-legal residence restrictions on privately owned land in a forestry district is a problem difficult to settle as ownership has certain rights.

"How far can we go?" We can go as far as "we—the people" demand. Times are changing. For example, new industrial processes have introduced light manufacturing into business areas, such as the invention of the small ice-cream-making machine, which has changed the status of a retail drug store, etc.

Industrial developments will probably require more refinement in our zoning regulations. We may need special purpose business areas, such as districts zoned for the automotive business only.

There are still certain amenities of life which zoning does not assure us of having. Zoning must be augmented by protective covenants to

give more detailed control. We know that zoning does not protect us from an area losing certain amenities because of changes in the type of people in a residential district, changes in race, creed, social class or educational homogencity.

I do not believe that we are limited as to how far we can go, but I do believe that zoning should not be required to carry the complete burden of controlling land uses. Our voluntary soil conservation districts formed under the State Enabling Act may be more successful in going farther than we can go, in the refinement of proper control in agricultural areas. Established county forestry districts might more properly handle details of reforestation, fire protection, and other rules and regulations in a zoned forestry area. The State Health Department can more successfully police and enforce health regulations in the zoned watershed areas. Protective covenants may more successfully control living conditions in residential areas and even in business, commercial, and manufacturing areas.

If "we the people" understand the comprehensive plan we can go far, voluntarily following zoning precedents already established. While zoning must be considered without having too many limitations, we must recognize that there must be a democratic process. There are needed details of refinement which go afield from the use of the land itself and which are also concerned with living conditions, such as the thoughts and actions, the quality and amount of education in the minds of the people themselves. Their hearts must be in the effort to obtain the best of living conditions using all the methods at hand, including zoning.

Jewels of the Spanish Crown

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ST. AUGUSTINE, SAN ANTONIO, SANTA FE AND MONTEREY

THE part played by Spain in colonizing what is now the southern portion of the United States and in transmitting to this area her culture can hardly be over-emphasized. Peoples, language, religion, customs, place names, and historic buildings and sites are ample evidence that her influence here was more than temporary.

To point out any one place in the United States as the outstanding example of Spanish background and culture would be difficult. Four cities portray Spain's influence very well, however. They are St. Augustine in Florida, San Antonio in Texas, Santa Fe in New Mexico, and Monterey in California. All capitals of former Spanish provinces, they range like jewels of the Spanish Crown along what was once the northern frontier of Spain's far-flung New World empire, from the Atlantic to the

Pacific. The best examples of that which was once Spanish, they are worthy of preservation by the people of America.

Active attempts are being made to preserve these cities. Through the efforts of national, state, and local agencies, and private institutions and individuals, much has been done to insure the retention of the historical atmosphere in them.

St. Augustine, founded in 1565 by Menendez de Aviles, is the oldest city of European founding in the United States. Her historic relics, covering a span of almost four centuries, include Fort Marion (Castle San Marcos) and nearby Fort Matanzas, the old city gates, and quaint inns, private houses, cathedral and churches, an old school house, and shops. The streets there show plainly the influence of succeeding Spanish, English, and American eras of control.

Well befitting her distinction, St. Augustine has taken a definite lead in her program of preservation. Following local efforts, and that of the National Government in proclaiming Forts Marion and Matanzas as national monuments in 1924, plans were instituted for the restoration of the city. The Carnegie Institution of Washington became interested in the project in the fall of 1936, and through the efforts of the City Commission and Mayor Walter B. Frazier of St. Augustine, a national committee was appointed to formulate a program. Meeting under the temporary chairmanship of Dr. John C. Merriam, President of the Carnegie Institution, in Washington, D. C., on October 26, 1936, this committee determined to commence at once upon a preliminary historical survey to be directed by the Institution under the active supervision of Dr. Verne E. Chatelain, staff member, who had previously been in charge of the historical work for the National Park Service.

On March 2, 1937, two reports were presented to the National Committee and adopted. One dealt with fact finding and the methods and scope of future historical studies, and the other contained recommendations for the future physical development of St. Augustine. Officially endorsed by the City Commission and the St. Augustine Historical Planning Commission, a local planning body, these reports resulted in the forming on May 11 of the St. Augustine Historical Preservation and Restoration Association, an incorporated body to conduct development phases. Dr. Chatelain was named the director of the general program of development, including the supervision of research activities.

Broadly speaking, the St. Augustine Restoration Program is a unique experiment in the educational use of the historic site as a means of popularizing historical knowledge. It has for its purpose the preservation and restoration of existing monuments and other physical remains. The general environment will be organized and planned to give these sites a proper setting in an effective presentation of St. Augustine's history. This history by objective physical treatment of its environment, supple-

mented by interpretative mediums, will be presented in complete panorama from its earliest stages to the modern day.

The preservation and restoration of St. Augustine will depend not only upon written documents, but, also, upon every available medium of science. The anthropologist, archeologist, architect, landscape architect, engineer, geologist, geographer, cartographer, astronomer, linguist, botanist, plant ecologist, paleontologist, and others will do their parts to make the story as complete as possible.

Structures will vary in their historical and physical aspects. Certain buildings will represent distinct periods in history, although the general plan is to give the visitor a "feeling" of preceding centuries. Single houses in some instances will present the evolution from Spanish to English to American eras of occupation and influence. The blending of all of these civilizations is that which gives St. Augustine much of its distinctive personality.

Although the historic structures of St. Augustine may, as a whole, form much of the skeleton of this city, some of its color will result from complete utilization of the folk-lore, traditions, and religious observances in the presentation of historical plays, pantomimes, pageants, festivals, fiestas, and pilgrimages. Creative activity will also utilize the historical in the preservation of folkskills and the home manufacture of handicrafts native to the region.

The master plan for the preservation and restoration of St. Augustine has been carefully worked out by a staff of experts. This plan covers thoroughly the problems of zoning, construction of boulevards, promenades, parks, parking lots, routing of traffic, and the removal of unsightly accretions which are not in harmony with the historical setting. In addition, an historical museum will be developed to interpret the history of St. Augustine as a whole. Period rooms, dioramas, models, pictures, documents, charts, artifacts, and other exhibits will be used in this museum to the greatest advantage.

Such is the program for St. Augustine. Up to this date much has been accomplished toward the end in view. Through the continued efforts of those interested, this historic city will be preserved for the edification and the enjoyment of those who live there or who visit it.

San Antonio, founded in 1718 by Martin de Alarcron, is also conscious of its historical heritage and is doing much to preserve it. Unlike St. Augustine, however, preservation work there is being carried on through the efforts of various agencies with little attempt to coördinate it as a whole. The State of Texas, the City of San Antonio, the County of Bexar, the Catholic Church, the Conservation Society, and various other organizations and individuals are interested in preserving the historic relics of this city. The result has been the preservation of the most important sites as distinct units.

The centers of historical interest in San Antonio are varied. Within

the heart of the city the old Alamo, made famous by the last stand of Colonel Travis and his small army in the Texas Revolution, is preserved. This chapel of the Mission of San Antonio de Valero is administered by the State of Texas in coöperation with the City of San Antonio and the Daughters of the Texas Republic. Another structure nearby, the Spanish Governor's Palace, is owned and administered by the City of San Antonio.

Under the leadership of Mayor Maury Maverick, the City of San Antonio has recently engaged in another task of preservation, that of the area of La Villita (the little village). A block-square section of this old part of San Antonio, within the heart of the city, is now undergoing a transformation. Working under the medium of a special ordinance passed in 1938 to allow the city to acquire and preserve this section, engineers, architects, landscape architects, historians, artists, and city fathers are busily engaged here. Through the assistance of the National Youth Administration, La Villita has been cleaned up and work has been started to restore it to its old-time atmosphere. The project, when completed, will include the preservation and restoration of the plaza and existing historic houses, in addition to the construction of a theater, an art gallery, and a museum-library-forum-community building. It will be a living community center, in which arts and crafts shops shall be maintained and operated in several of the restored buildings. As the ordinance creating it reads:

> The objectives of 'La Villita' in this particular field shall . . . be two:
>
> First: fostering the production of arts and crafts which are useful, true in design, of good quality and workmanship, and which can be sold at a profit; and
>
> Second: the training of youth to fit into the modern complex of a merciless age.

There are other areas in San Antonio which are being preserved. The old Mission of San Jose y San Migeul de Aguayo, located outside of the city, is owned in part by the County of Bexar, the Catholic Church, and the Conservation Society of San Antonio. In addition to this, there are the San Fernando Cathedral, and the missions of San Francisco de Espada, San Juan de Capistrano, and La Purisima Concepcion de Acuna which are owned by the Catholic Church. The old aqueduct and numerous smaller buildings dating back to Spanish days are also important.

Although preservation steps have been taken in San Antonio by these various agencies, it is believed that some unifying plan for the city as a whole is necessary. A complete master plan based upon accurate historical research, as was formulated for St. Augustine, would do much to preserve historic San Antonio and would, at the same time, fit that which is historical into the living modern city. Through a coördination of effort looking toward the fulfillment of such a plan, in which all interested agencies, institutions, and individuals may coöperate, San Antonio will

be able to utilize to the fullest degree the historical background which is hers.

Santa Fe, next to St. Augustine, is the oldest inhabited city of European founding in the United States. Founded by Pedro de Peralta about 1610, it reflects an heritage of Spanish influence over 300 years old. Like San Antonio, preservation efforts here have been carried on through more or less separate endeavor, with local tradition and attitude depended upon for a large measure of control. The State of New Mexico, the City of Santa Fe, the Catholic Church, and private individuals have been the preservers of the most important structures. It is true that other agencies have coöperated at times to insure authenticity to what preservation has been done.

The outstanding building preserved in Santa Fe is the Governor's Palace, first constructed about 1610. It has been said that no public building in the United States is comparable with this old adobe palace. Today a state monument, it is owned by the State of New Mexico and is occupied by the Museum of New Mexico, the State Historical Society, and the Schools of American Research.

Other buildings and sites of importance in Santa Fe are the San Miguel Chapel, the church of Nuestra Senora de Guadalupe, Rosario Chapel, and the Cathedral of San Francisco owned by the Catholic Church, the Garita (largely destroyed within the past two years) owned by Sylvanus G. Morley, the remains of Fort Marcy, and several other buildings or remains which date back to Spanish days.

Santa Fe, already outstanding in its utilization of Spanish and Indian arts, crafts, architecture, customs, folk-lore, and history, also needs an accurate survey of its historic buildings and sites, as well as a complete master plan. Accurate determination of historic buildings and sites, adequate marking, and a coördinated effort toward historical preservation in the living modern city are necessary here as elsewhere. Such coördinated effort upon the part of interested agencies and persons would do much to save what is historic in Santa Fe. During recent years more than one building has been destroyed because of vandalism, deterioration, or the inroads of modern improvements. Such a trend will increase, especially in view of Santa Fe's fast growing population and tourist attraction, unless careful plans are laid now to protect the unique atmosphere which is hers.

Monterey, founded in 1770 by Father Junipero Serra, although the youngest of the foursome of outstanding Spanish founded cities in the United States, has made great strides toward the preservation of its historical values. This city, famed for its Royal Presidio Chapel, Custom House, First Theater, Serra-Viscaino Landing Place, Colton Hall, El Castillo, and many other buildings and sites, has locally long taken an active pride in its history, especially through the efforts of the City of Monterey, the Monterey History and Art Association, and private

organizations and individuals. In recent years, the United States Government, the State of California, and the Carnegie Institution have actively entered to help preserve the old capital of California. Primary effort is still exerted mainly by local groups and the State of California, however, with outside agencies and institutions acting more in the capacity of advisers.

In May, 1939, a master plan, based upon accurate historical research, was submitted to the city of Monterey by the Planning Commission in collaboration with Emerson Knight, well-known city planning adviser. This plan, emphasizing the retention of the informal and historical charm of the old, looks forward to the full utilization of the historical, scenic, recreational, commercial, industrial, and civic possibilities of Monterey. The following objectives are stressed therein:

The importance of thoroughly protecting natural scenic assets in shoreline, beach and bluffs, El Estero, the mesas, native oaks, pines, and cypresses.

The need of careful planning to render El Estero and other existing parks more attractive for mild recreation; of providing a generous, city-wide system of parks, playgrounds, parkways and street planning to meet the needs of Monterey for many years; of building extensive beach promenades, and providing a municipal bathhouse with parking areas on the south side of the East Promenade.

The need of respecting and providing for all residential, commercial and industrial interests.

The importance of acquiring properties along the borders of the Civic Center to preserve certain historic houses and to provide sites for future public buildings. . . .

Zoning restrictions in order to maintain scale; this should be accomplished by limiting all new buildings to three stories or, preferably, two in height.

The determination to preserve historic buildings and to create historic zones embracing each historic building and its pictorial setting.

The need of weaving the pattern of our evolving city around the older houses, together with an obligation on the part of the builders and owners not to mar but to safeguard early relics.

The plan gradually to acquire key historic buildings together with their sites in order to round out and strengthen the chain of public holdings along or near the Historic Ring Route, and of providing such landscape treatment throughout this Ring Route as will ensure harmony and unity.

And finally—constant vigilance and wise planning to overcome ugliness and unsightly conditions so that the public, awakened to what can be accomplished, will insist upon a consistent and thorough-going program of civic improvement and beautification.

Three major steps embracing a long-term program are contemplated

to carry the above objectives forward—a minimum or primary plan, an intermediate plan, and a maximum or ultimate plan. The minimum plan recommends the acquisition for public use of playgrounds, a beach park, an historical park, a pedestrian ramp, and several outstanding historic buildings and sites not now in public ownership. In addition, certain promenade and park projects and the reinstatement of the plaza north of the Custom House are recommended. The intermediate plan calls for parkways, additional playgrounds, and protection of the Civic Center Setting. The maximum plan provides for street widening, and the additional creation of parks, parkways, a beach project, acquisition of historic buildings, and recreational and school areas.

Monterey, having an adequate master plan which stresses the importance of the historic in the modern living city, looks forward to a concerted effort to preserve that which is historic. Full coöperation and coördination of effort between the agencies, institutions, organizations, and individuals interested in its well-being will insure its adequate preservation and development.

St. Augustine, San Antonio, Santa Fe, and Monterey—jewels of the Spanish Crown—so typically Spanish in their origin and atmosphere, will continue as living examples of the greatness of Spain's colonizing genius through these efforts to preserve them.

Public Education for Planning

FREDERICK BIGGER, Pittsburgh, Pa., Chairman, Pittsburgh City Planning Commission

THE WORK OF CITIZENS' PLANNING ORGANIZATIONS

THE work of citizens' planning organizations is to be discussed, I assume, partly because of the implication that such bodies should deal with public education in planning. In the second part of this paper I draw upon the experience of one such organization, which is now well along in its twenty-third year of existence.

Before making a choice among the high lights of progress and defeat which accent the life of any active group, it is proper to have a frame of reference. The first part of this paper attempts to outline that frame of reference against which any citizens' planning organization may be evaluated.

PART I

Learning and teaching. In most fields of endeavor, there are processes and operations which must be learned by some persons and taught by others. Usually the process of education in these fields—in that of planning, for example—is concentrated primarily in the field itself, and in those schools which attempt to prepare their students for later practice in that field. In the better schools, academic training is adjusted so as

to bring the student into direct contact, as frequently as possible, with actual practitioners in that field and with their work. The persons from whom planning may be learned are those who teach and those who practice planning. Academic training without practice, or without proper contact with actual practice, is likely to be inadequate and may be distinctly harmful. These axioms are stated here because we are discussing education.

Two of the objectives of planning. There are two obvious objectives which both the planner, and the teacher of planning, must have in mind. One of them is the constant improvement of the technique of planning. This must not be minimized in importance; but it is not the only aim of the planner. The second objective, in the minds of the planner and educator, is that of directing planning technique toward its successful application upon immediate problems, and its gradual coming to grips with planning problems of broader scope or longer range. Such orientation of planning technique will produce programs—of public improvement, for example—adjusted to the limitations of social and economic background and capacity. Probably programs thus evolved will be successful in direct proportion to the skill and thoroughness which have been devoted to the prior planning study.

Education beyond the planning field. There is another phase of education, with respect to planning, to which citizens who are laymen may be subjected. Before we can get at that matter more definitely, it is important to consider an intermediate step.

Significant community needs. Of the many fundamental needs in modern American communities there are four that I want to mention as of especial significance to planning.

1. The need for an official planning agency which is non-political and non-partisan—an agency which is competent, and which will bear approximately the same relationship to the local government as an industrial research organization bears to the parent industry or to industry as a whole.

2. The need to eliminate most, perhaps all, promotional activity from the planning board's program. Such activity tends to create resentment in other departments of the local government and among those citizens who have contrary ideas, and may weaken the planning board's essentially objective point of view. Moreover, the intellectual integrity and ethical standards required of the professional staff planners do not lend themselves to the devious ways of the typical promoter.

3. The need to *explain,* constantly, the problems with which the planning agency has to deal, to explain the advantages and disadvantages of alternative solutions of those problems, and to explain the planners' own specific recommendations. This need to explain is a public service which official planning agencies often are unable to satisfy. They cannot do so because of limited budget and personnel. Explanations can easily be dull; they are not regarded as "news"; and generally they appear in the daily papers only when a newsworthy controversy is raging.

4. The need to have a citizens' planning organization of entirely unofficial character, not as a substitute for the official planning board but as a supplement

to it. (If there is a planning director but no official planning board at the town hall, the citizens' planning organization might function as an advisory body.) It may be induced to do some of the neglected general planning if the town's budget and personnel, or its policies, prevent that planning from being done by a municipal agency.

Citizens as planning board members. Appointive, unpaid, citizen members of official planning boards may bring to their task important special aptitudes and experience. Perhaps they are members of one or another of the recognized professions. Frequently, some or all of the planning board members are laymen, with respect to the planning field. These laymen, together with those who come from a field of professional or specialized experience, must acquire a greater breadth of vision, a larger understanding of the relationships of things to be planned, and knowledge of the administrative machinery set up to deal with public affairs. In other words, these planning board members must become more fully educated as a result of their coöperative service in the public interest.

A citizens' planning organization. It is axiomatic that a citizens' planning organization must be unofficial. It should be non-political and non-partisan, and be free of special interest. The persons who constitute the nucleus of such a body might be much the same types of citizen as are found on the official planning board. Obviously, they must be able to work together. Collectively, they must have sufficient intelligence, knowledge, courage, vigor and influence to help the official agency to function properly—something not easy to do, when we recognize that the policy of the local government, in cases of controversy, is apt to be weighted less with the analyses of planners than with the political or financial potency of pressure groups or individuals who are to be appeased. It takes a long time for impartial planning technique to become acceptable as the soundest public compromise between rival vested interests.

The functions of a citizens' planning organization, in a democratic society, would include: the understanding support of the official planning board; constructive criticism of that board if it fails in or departs from its proper functions; education of its own members to an understanding of planning procedures and possibilities; and a selective education of the citizens of the community where, collectively, public opinion is supposed to reside, but where actually there are as many variations and permutations of interest as there are identifiable pressure groups.

Somewhere, off at the ends of such active steps in study and planning, there may be some enthusiastic but qualified promotion, designed to get something done. When such times come, however, the danger is that the planning organization will revert more and more to the less disciplined activities of a so-called improvement association. It has happened, at such moments, that the mayor and local legislators have

not been conscious, seemingly, of any difference between such a body, with its background of planning study, and any one of many sectional pressure groups.

What types of citizen? Except for official planning board members, the individuals who organize and become the leaders of a citizens' planning organization certainly are the first of all the groups of lay citizens who must be subjected to some kind of educational process, whether they admit the need of it or not. It is a very human error to presume that success in one field indicates competence in another. And we know that one of the most specious assumptions of democratic emotionalism is that the possession of the franchise is synonymous with possession of knowledge of what to do and how to do it.

If we were to be given the power to choose the persons to lead a citizens' planning organization, there would be every reason to appraise carefully each potential candidate. We could not ignore these facts: that there are the widest differences in individual educability, in incentive toward self-education, in the quality and scope of civic consciousness and responsibility, in individual competence in the commercial world or in the professions, in the attitudes of people of wealth and power, and in individual emotional driving power—both disciplined and undisciplined.

Some qualities alone are inadequate. The leaders of a citizens' planning organization will not be competent to lay the foundations for increased efficiency and accomplishment in planning if their dominant characteristics are merely the possession of civic consciousness, a sense of civic responsibility (which is a different matter), and good intentions. Such a group can be little more than a presumably ill-informed evangelistic society.

Suppose there is an aggressive salesman or promoter in a group of that kind; what is there for him to sell or promote? I believe it is impossible, inherently, for him to emotionalize his fellow citizens into demanding community self-discipline. And self-discipline is not far from being basic in the planning process. Such an advocate may be able to persuade people to want something, or to get something done, and at the same time he may be unconcerned or uninformed about what should be done and how it should be done. He may confuse the local scene, and the calm discussion which is so much needed. He may be impatient with the local planning board for no sound reason, but only as an expression of his own emotional frustration. Moreover, when he has induced a "public demand," that demand in itself is not evidence that those who make it really understand the problems to be solved, or that they grasp the full significance of what is being advocated.

Fundamental decision on program necessary. How can a small group of citizens help the entire community to understand its needs, to understand the procedures and capacities of their local government, to under-

stand the difference between an improvement which will solve a problem and a proposal which would solve no problem adequately but instead create new and more difficult problems?

We do not have to pursue this kind of inquiry very far to see that we should make a very important differentiation *before* we launch the organization. We must see the difference and make the choice between whether merely to promote and persuade in order to get something done, or whether to cultivate knowledge and understanding as prerequisites to something else,—that something else of course, ultimately to be resolved in terms of practicable programs of improvement. The second of these two alternatives is the only possible one to accept if we are concerned with what is really education, and if we are willing to undertake the long and difficult task of laying proper foundations for planning and achievement. There can be no doubt that a citizens' planning organization, even if it is not fairly ignorant regarding planning, when it begins its civic activities, must give thought to its own education.

But when we make this decision as to the character of the group's program, we should not forget that, periodically, the community will become vocal with impatience because the planners are not ready for the approval, or construction, of something they have not been allowed the time to study. That will be an evil hour, if the planners cannot take it, and if they do not use the crisis to lay another foundation stone of public understanding. And it will not be a carefree time for the citizens' planning organization if its own perspective is lost and its morale is broken down by the impatience voiced in other quarters. Many temporary defeats—and there have been many—may be traced directly or indirectly to this cause. How to reduce the number of such defeats in the coming years, how to recognize that what appears like defeat may only be a temporary set-back—these are two of the questions in the minds of those concerned with public education for planning.

Selective education. I have referred to one of the tasks of a citizens' planning organization as that of effecting a selective education of the local citizens. As a matter of fact, selectivity is characteristic of what I have been trying to say, when referring to planners selected for their professional aptitudes and skill, planning board members selected because of certain qualifications other than political or partisan, leaders of a citizens' planning organization selectively chosen, etc.

I am not familiar with pedagogic terminology and connotations; and the term "selective education" may not be a good one. However, I think my meaning should be reasonably clear. Remembering the inequalities of the educational system and its achievements, it seems reasonable not to try to reach, first of all, the lower levels of understanding and intellectual capacity when we are explaining current planning problems. Efforts to reach down that far will be made, in simple fashion, by someone; but no busy planner, or planning board, or citizens' planning or-

ganization will have the funds and facilities to do this, either appropriately or thoroughly. The causes of community maladjustments, which so often determine the planner's problems, are too complex to be explained easily to even the average newspaper reader. The explanations which must be given (to which I have referred a number of times) should go to a selected list of persons, rather than indiscriminately to everyone. Very likely there will be small groups, within the larger selected list, to whom it will be desirable to give particular types of explanation based on an estimate of the recipients' peculiar interest and point of view.

Inadequate preparation is deplored. Before turning to the second half of this paper, it is proper to confess that this attempt to set my thoughts in order has been motivated, in part, by some impressions that have come to me during the past few years. Perhaps some of us have been expecting too great results from too little preparation. Throughout the country, many official planning boards have been created; and many lay members have been appointed to serve on those boards. It is my impression that there are far too many such planning board members who are lost in a sort of no-man's land between, on the one side, a going political administration and, on the other side, citizens who lack knowledge, interest, and ability to distinguish between planning which is good, inadequate or bad.

PART II

After the early mapping of streets in what is now the downtown business district of Pittsburgh—in 1764 and 1784—one hundred and twenty-six years elapsed before the beginnings of a modern approach to planning were undertaken. In 1910 a legally constituted city planning commission was created; and in 1918 there was organized by leading citizens a privately financed Citizens Committee on City Plan. It was incorporated, in 1920, as a non-profit organization, under the unwisely selected title "The Municipal Planning Association," which title was changed, in 1938, to "Pittsburgh Regional Planning Association."

Charter states purposes. The charter recites the three purposes of the organization:

(a) To promote the orderly and efficient development of municipalities;
(b) To promote the adoption of scientific methods of city and municipal planning;
(c) To secure constructive publicity in matters pertaining to municipal planning problems and their solution; and to these ends to collect, to classify, to analyze, to correlate, to interpret and to publish facts with reference to municipal planning needs, methods and benefits; and in connection therewith, to prepare and to publish for free distribution, scientific model municipal studies and plans, under the authority and provisions of the Act of General Assembly of July 15, 1897, Section I, Paragraph 3, Subdivisions II and III, which provide for the incorporation of organizations for the support of charitable, educational and scientific undertakings.

Pre-organization activity. I cannot tell this story without an ap-

pallingly frequent use of the first personal pronoun. But you will discount this, I am certain, for there can be no disagreement with the fact that, in any group undertaking—and that is what we are discussing—one person alone accomplishes nothing. It is the group which succeeds or fails.

I shall refer to the organization of citizens as "the Committee," so as to distinguish it from other bodies. When the Committee was formed, in 1918, the by-that-time moribund official commission took on a new lease of life, and almost immediately the county commissioners appointed a county planning commission of well chosen party men, perhaps to rubber stamp the county's proposals. We later helped to secure legal reconstitution of the county planning commission along modern lines. Opportunity is lacking to tell of the frustrated efforts of the city's first planning board members. When their annual appropriation had dropped to the dramatic low of $100 for stamps, something had to be done.

From an entirely different avenue of approach, I devoted four or five years to lectures in schools and elsewhere on architecture (my basic profession), housing and town planning. With the one important civic club of the region, there were such activities as writing housing legislation, drafting the state enabling act for zoning, reviewing and investigating long lists of tax delinquent properties offered for sale by the city, and various other duties which the leaders of that club decided to undertake. The community had had Frederick Law Olmsted's early street report (1910) and several transit reports—each slowly getting itself forgotten in the usual manner.

In a then dominantly Republican city of a traditionally Republican State and in a city of heavy industrial and manufacturing operations, it was not hard to imagine where was the source of both the political and financial powers. Being privileged to be in contact with three men of considerable wealth and influence, it was my privilege to share with them the job of actually organizing the Committee. For better or worse, when the time was ripe, a new organization was decided upon rather than an investment in an expansion of the program of the civic club.

Influential group: Money. The original leaders surrounded themselves with other business men and the first announcement of the names of the board of directors brought fan mail which advocated everything up to the completion of Utopia.

At the first meeting, in five minutes, there were subscriptions totaling $20,000. I outlined a program and estimated an outlay of $400,000. Practically without argument, or flinching, this was cut to $250,000 as a probable maximum outlay to cover the first three or four years. Professional planners of reputation were invited from other cities to appraise the program, to check the estimated cost, to offer alternatives, and to present their credentials as possible expert consultants. Mr. Bartholomew was finally engaged. To supplement voluntary subscriptions, others

were solicited. At the peak there were over four hundred subscribing firms, corporations and individuals. The number fluctated through the years. It is now low. The aggregate expenditures over the past twenty-two years ran beyond $300,000.

First studies and reports. During the first four and one-half years, six comprehensive plan reports were completed. Studies had been developed by the technical staff under the watchful eye of the visiting consultant. Board members, in committees of overlapping membership, spent afternoons and evenings mastering the material and making it their own. Seldom, I believe, has a better job of self-education in planning been done by any group. The recommendations, the opinions, and the judgment were those of the group; and to that I credit much of the persistence of the work, and its resistance to the inevitable grumblings of those dissatisfied with the findings.

Relationship to official planning board. One of the three instigators of the Committee was a member of the city planning commission. Later five of the Committee had been appointed members of the official body. The overlapping was healthy; both agencies functioned; and there were no ill effects. Help was given in asking for adequate normal appropriations for money, for a much needed topographic-geodetic survey, for preparation of a zoning ordinance with imported consultant services, for special study of the central district's articulated loop traffic thoroughfares.

A periodical: other exposition. Early in the Committee's life, it engaged an excellent publicity man. He established a periodical, to which the technical staff contributed. At first it appeared each month of the year, except in summer; later issues were less frequent (sometimes because funds were low, but often because nothing of especial importance needed to be explained). From 1923 to 1935 the periodical was my responsibility. The last issue, No. 51, appeared in January, 1939; but before this paper is read another number probably will have appeared. The periodical, with letter-size pages, varied from four to sixteen pages per issue. After the report-making period, current city hall events were explained, cartooned or otherwise illustrated—all having to do with planning. The Committee's coöperative work with the civic club and chamber of commerce was reported. We mentioned a junior civic club's study of planning proposals—particularly those relating to the playground system. The mailing list, slowly built up and classified, later rejuvenated, is now without minor classifications but totals between eleven and twelve thousand names.

Many talks were given throughout the city. We appeared before city council in committees, and singly. Most often we were represented by a small delegation. As time went on that duty fell upon two of us, and finally upon me. I have to report finding myself thus on the firing line several times while my army was retreating over the hill! I report this

as evidence of fluctuating vitality in a group of otherwise active business men. When so many times the action had to be in opposition to ill-timed or poorly planned proposals, it was necessary that I have explicit understandings with my executive committee, to avoid misrepresenting them or placing them in any position to feel embarrassment.

Joint planning conference. At one period, when a large county bond issue program was bring belatedly planned, the Committee instigated, and participated in, a conference group with representatives of the two official planning agencies. After two years of this, with all formal gestures perfectly performed, everyone finished the task quite worn out. It has never seemed possible to reestablish such a group, although it is needed as much as before.

Readjustments. I am telescoping one part of my history into another. Going back to the time when the last of the six plan reports was distributed, I note that my recommendation was approved. This allowed me to go easy on stirring up widespread but premature interest in an overwhelming number of report recommendations. Instead, the Committee allowed me, as one of the unpaid members of the official planning agency, to help that commission and its staff, as if I were a paid employe. This made up in part for inadequate numbers of staff, and allowed me to direct the self-education of some of the younger staff members. During these seven or eight years my work continued with the private Committee. I served as its technical adviser, executive officer, editor of its periodical and writer of explanations of planning problems for lay readers. Those were very busy years during which all of us, at different levels of experience and skill, were educating ourselves further and helping others to do likewise. These activities naturally expanded and ramified through participation in the work of other organizations, such as those devoted to housing, etc.

The low point. A year or two after the financial crash, the Committee closed its offices and stopped all expenditure. Several of us continued to serve on the official planning body; but a local political and partisan upset affected all municipal departments, and finally left me as the sole survivor of the Committee group to serve upon the official planning board. The Committee's officers met, informally, a few times in a few years. They gathered their adherents and came forward nobly when an emergency in planning arose with which the official body could not cope. Slowly the idea of the need for revitalizing the dormant private organization grew, up to the point of actual renewal of expenditure and activity, late in 1937.

Revival. In 1938 and 1939, under the present changed name, the Committee has become more dynamic. Its private view of its obligations stressed three aims:

1. To help the official agency, including assistance in eliminating some maladjustments resulting from the municipal administration changes. To

these duties I have devoted the major part of my time; and the official board and its staff seem to me now to be in better condition for service than ever before.

2. To try to coördinate the points of view and plans of city, county, and state highway planners, who represent different jurisdictions in one respect, and have differing responsibilities—but who also ought to have their activities coördinated whenever one political entity spends money for improvements within the area of another political entity.

3. To try to effect some working basis among rival property or business interests of the small but vitally important central business district which is known as "the Golden Triangle."

For many years I have been a member of the board of directors of the Committee. Because of my unpaid membership on the official planning body and my paid consulting service to the Committee, we have anticipated my eventual withdrawal from one or the other. That move was to be determined by the results of the effort to reconcile business interests which had objected to the official and objective appraisal of projects they had promoted. In May of this year I withdrew as the paid consultant of the Committee. I shall watch hopefully for successful progress of the citizens' Committee, and its adherence to the objectives stated in its charter.

Physical improvements. One of our downtown waterfront thoroughfare improvements nears completion, according to plans of the city, although being largely paid for by the county. A new out-of-town expert, with a reputation for getting things done, was paid a very large sum to make a non-technical report on a thoroughfare program. This involved dramatic presentation of some of our local traditional plans, exactly or with slight modification, plus a new scheme or two. That report, or projects mentioned in it, and rival claims are the basis of the controversies of the present period. A second waterfront thoroughfare scheme is in the planning stage along lines close to those suggested by the maker of the dramatic report. Other highway improvements, to cost many millions, engage the attention of the planners and the conversation of interested groups.

Attracting less attention, part of the city's bond issue improvement program, now nearing completion, involves belated construction of many recreation buildings and other structures on city playgrounds—to the tune of about two million dollars. Thus, there are real accomplishments to be seen, after twenty years, in this most socially significant phase of the Committee's original comprehensive plans.

CONCLUSION

It has been extraordinarily difficult for me to distinguish what has been contributed by official and unofficial planning bodies, by civic groups and individuals. Confused as this present story may have been, it yet shows, I think, something of the local significance of Pittsburgh's planning practice and its education for planning.

And, finally: I have wondered for a long time whether a more complete story than the one written here, and with explanations of specific situations, could be a helpful document to anyone. As I watch the rapidity with which books are scanned, as I detect the curtain of words and false impressions thus secured, and as I puzzle over the loss of clarity of thinking which this so often involves, it seems to me to be more than ever true that no one ever learns except by experience. And I think that is pertinent to the problem of education for planning.

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